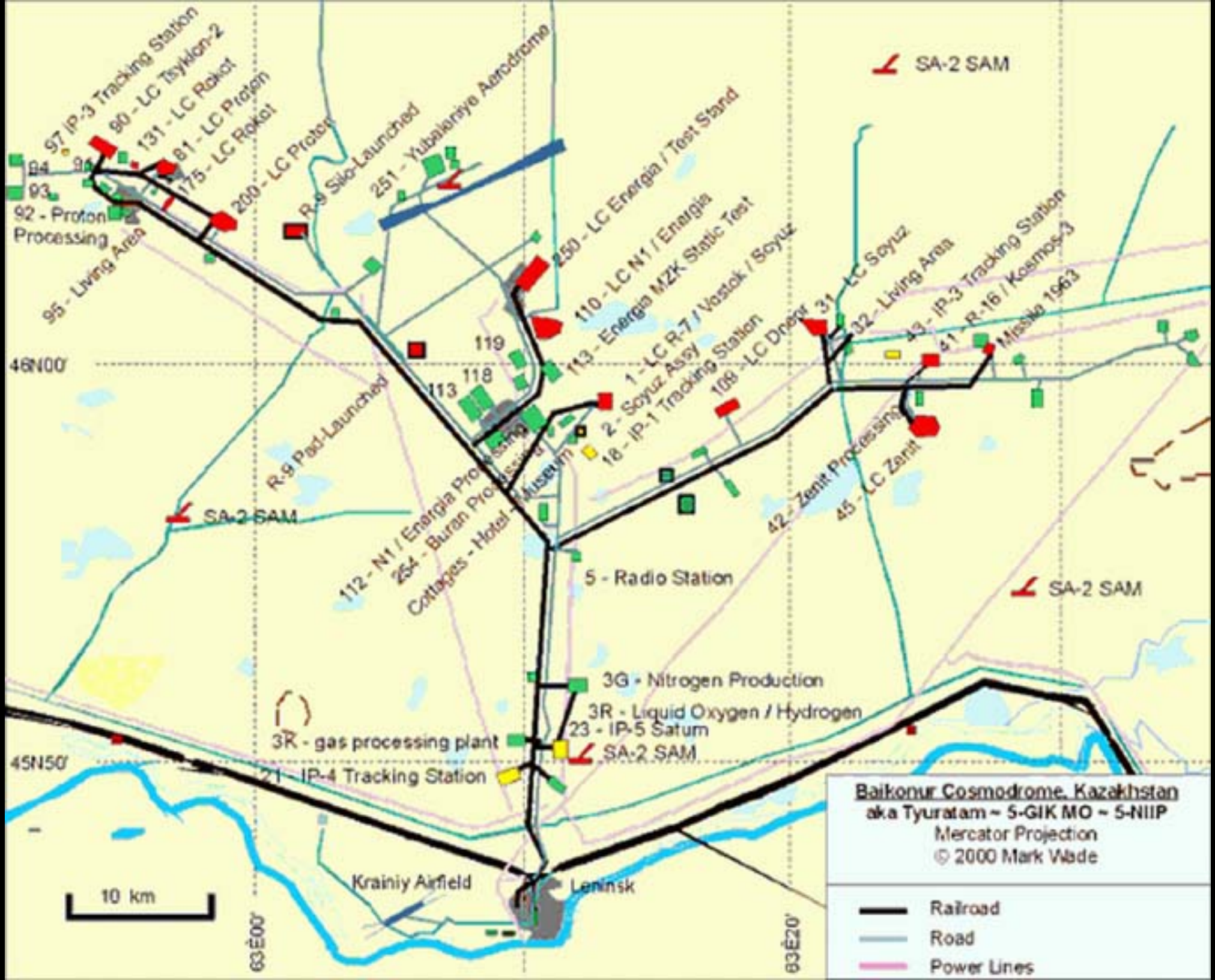
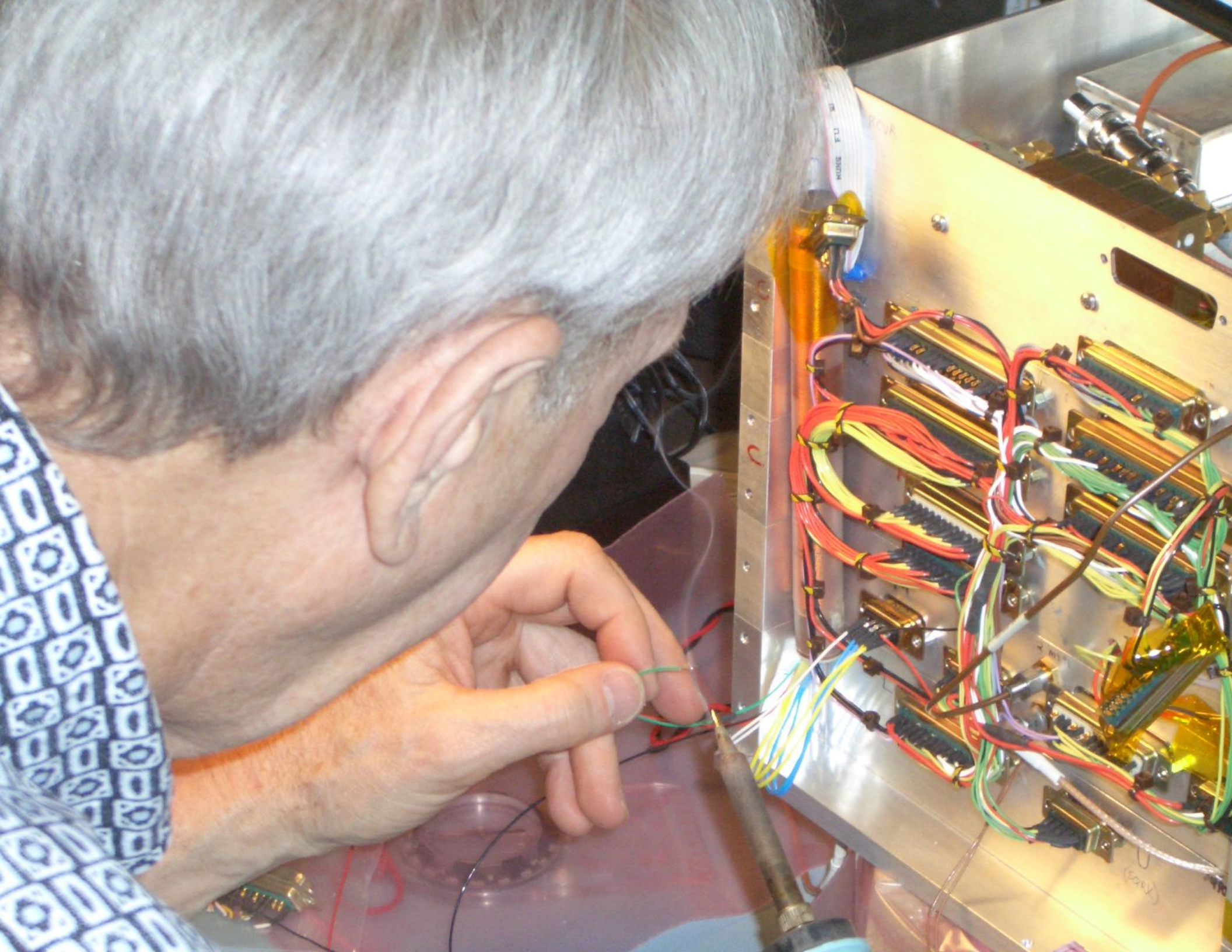
KAZAKSTAN
RUSSIA
MONGOLIA
N. KOREA
JAPAN
IRAQ
TURKMENISTAN
UZBEKISTAN
IRAN
KYRGYZSTAN
S. KOREA
TAJIKISTAN
AFGHAN-
ISTAN
CHINA
PAKISTAN
BHUTAN
NEPAL
OMAN
INDIA
MYANMAR
LAOS
PHILIPPINES
VIETNAM
THAILAND
BANGLADESH
CAMBODIA
SRI
LANKA
MALAYSIA
www.theodora.com/maps

RUSSIA
RUSSIA
Petropavlovsk
Qostanay
(Kostanay)
Pavlodar
ASTANA
Semey
(Semipalatinsk)
Öskemen
(Ust'-Kamenogorsk)
MONG.
Oral
(Ural'sk)
Aqtöbe
(Aktobe)
Qaraghandy
(Karaganda)
Atyraû
(Atyrau)
Lake
Balkhash
Baykonur
Cosmodrome
Aral
Sea
Bayqongyr (Baykonyr)
Qyzylorda
(Kyzylorda)
Aqtaû
(Aktau)
Khan
Tängiri
Shyngy
Almaty
CHINA
Taraz
Shymkent
Caspian
Sea
AZER.
KYRGYZSTAN
UZBEKISTAN
TURKMENISTAN
0 100 200 km
0 100 200 mi


SA-2 SAM
97 IP-3 Tracking Station
90 - LC Tsyklon-2
131 - LC Rokot
81 - LC Proton
175 - LC Rokot
200 - LC Proton
R-9 Silo-Launched
251 - Yubileiniye Aerodrome
250 - LC Energia / Test Stand
110 - LC N1 / Energia
113 - Energia MZK Static Test
1 - LC R-7 / Vostok / Soyuz
2 - Soyuz Assy
18 - IP-1 Tracking Station
109 - LC Dnepr
31 - LC Soyuz
32 - Living Area
43 - IP-3 Tracking Station
41 - R-16 / Kosmos-3
Missile 1963
84
94
93
92 - Proton Processing
95 - Living Area
119
118
113
46N00'
R-9 Pad-Launched
112 - N1 / Energia Pro
254 - Buran Pro
Cottages - Hotel - Museum
5 - Radio Station
42 - Zenit Processing
45 - LC Zenit
3G - Nitrogen Production
3R - Liquid Oxygen / Hydrogen
23 - IP-5 Saturn
3R - gas processing plant
21 - IP-4 Tracking Station
45N50'
Krainiy Airfield
Leninsk
10 km
63E00'
63E20'
Baikonur Cosmodrome, Kazakhstan
aka Tyuratam ~ 5-GIK MO ~ 5-NIIP
Mercator Projection
© 2000 Mark Wade
Railroad
Road
Power Lines

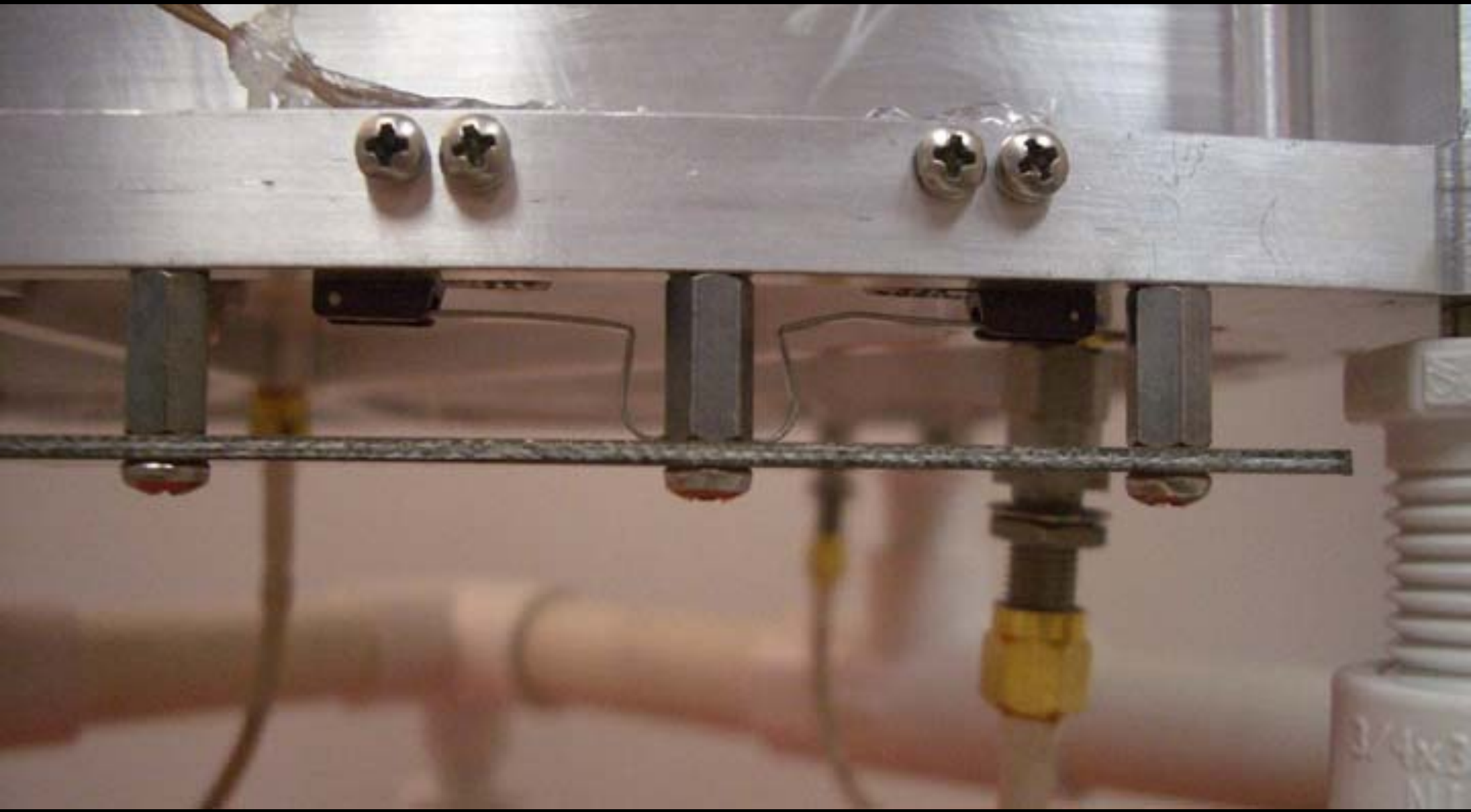


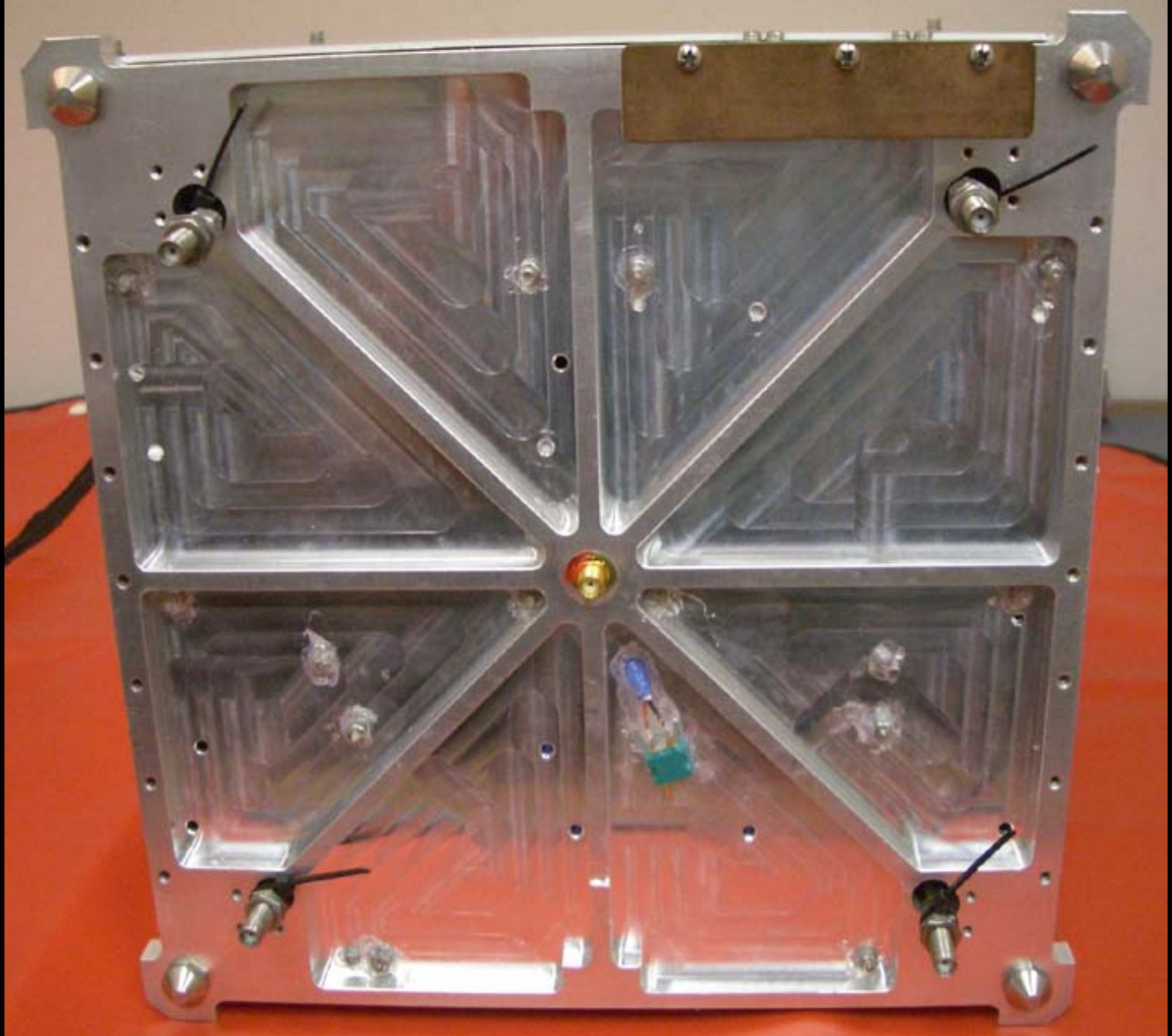
UPGRADING

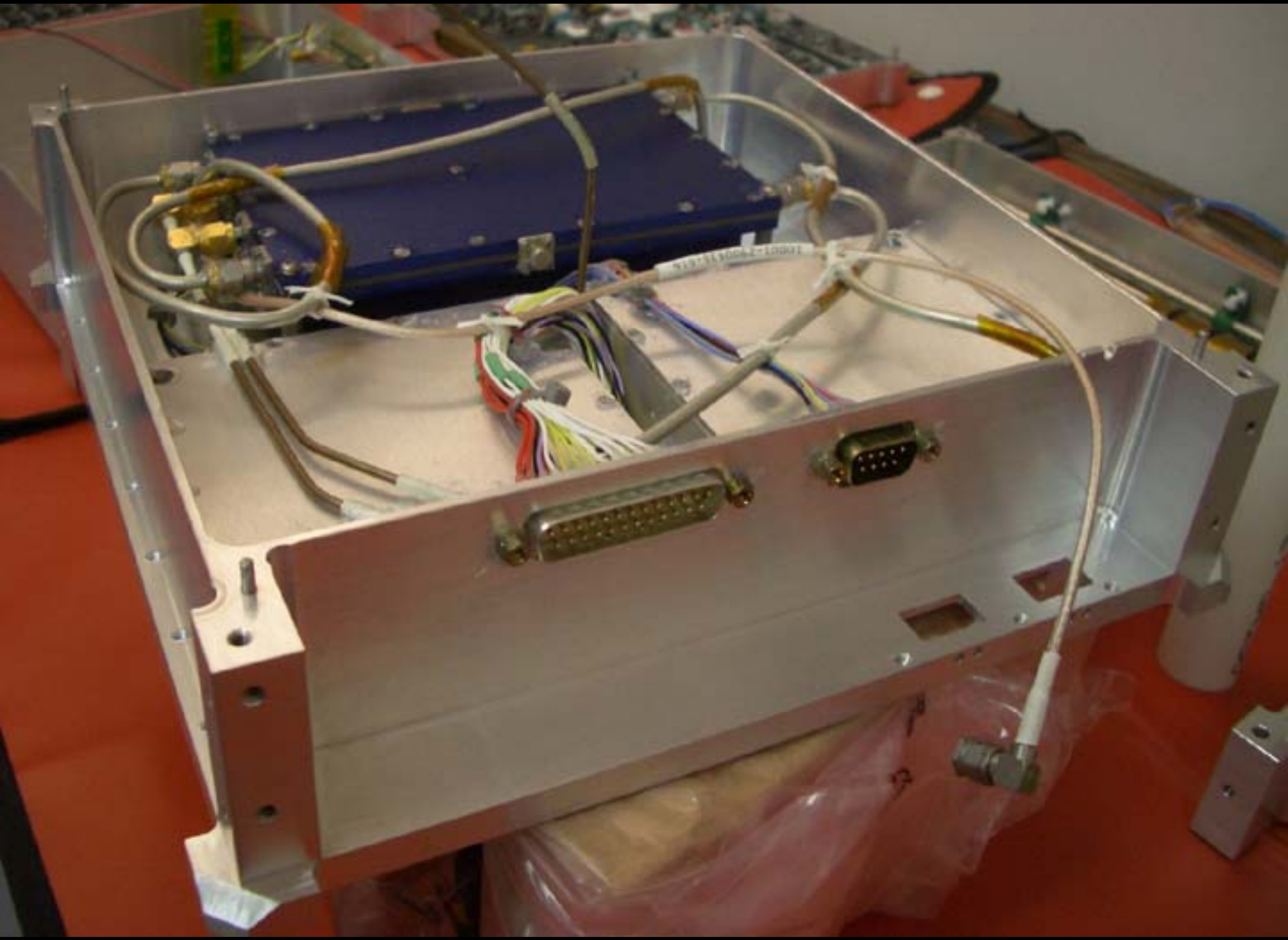
ECH
42
H aisle
J window

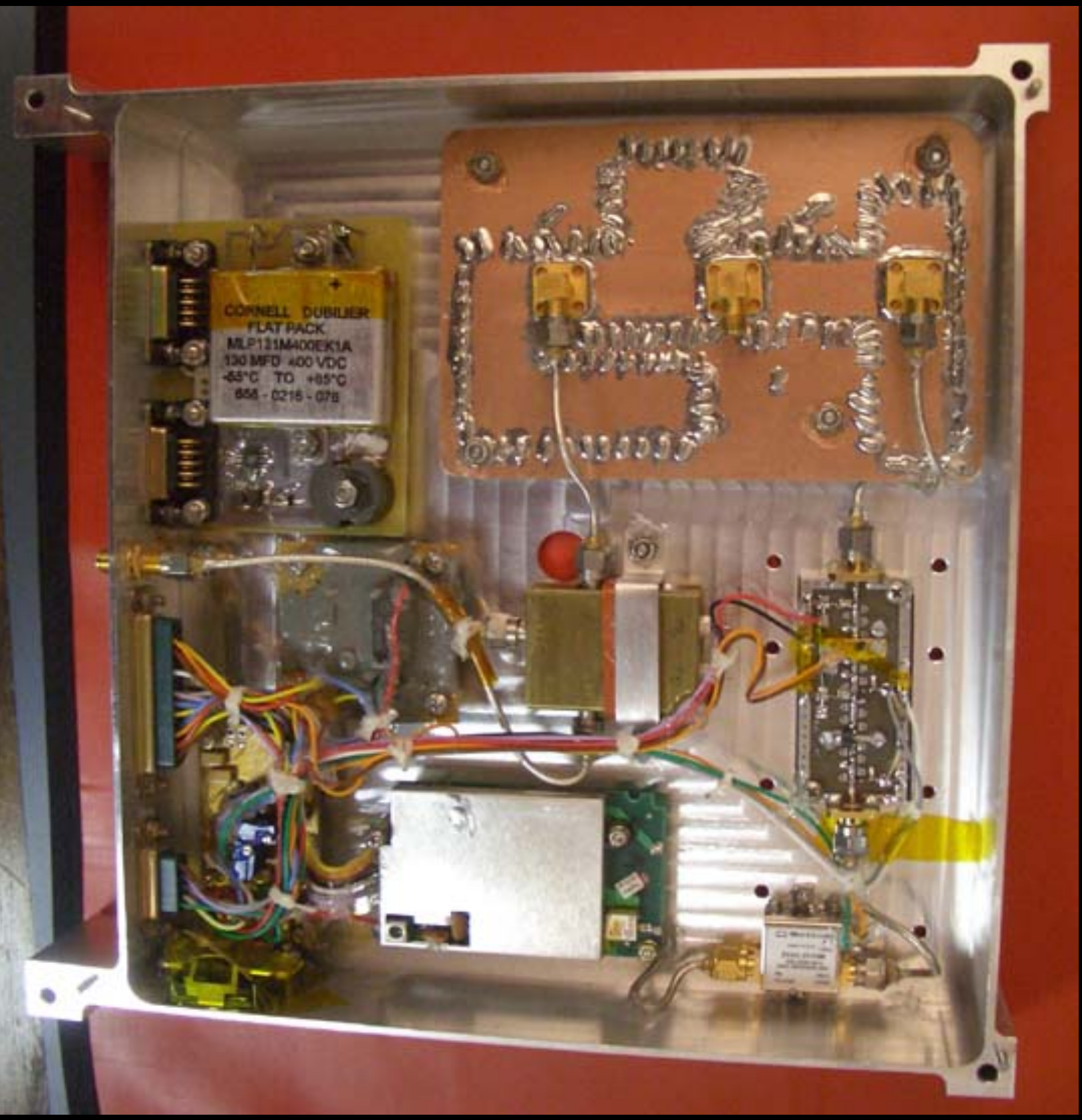
103
SpaceQuest
ECHO

KENWOOD

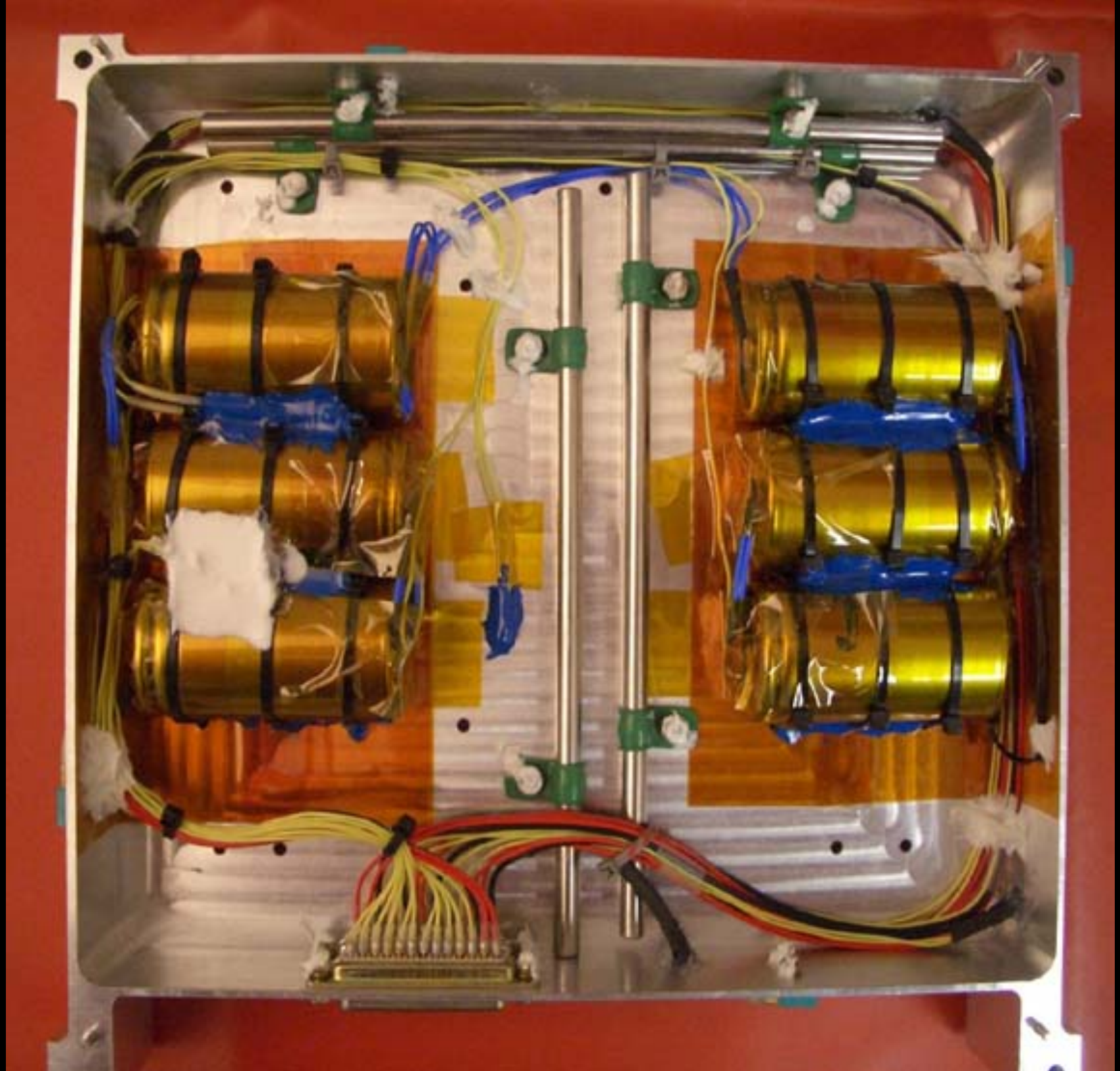


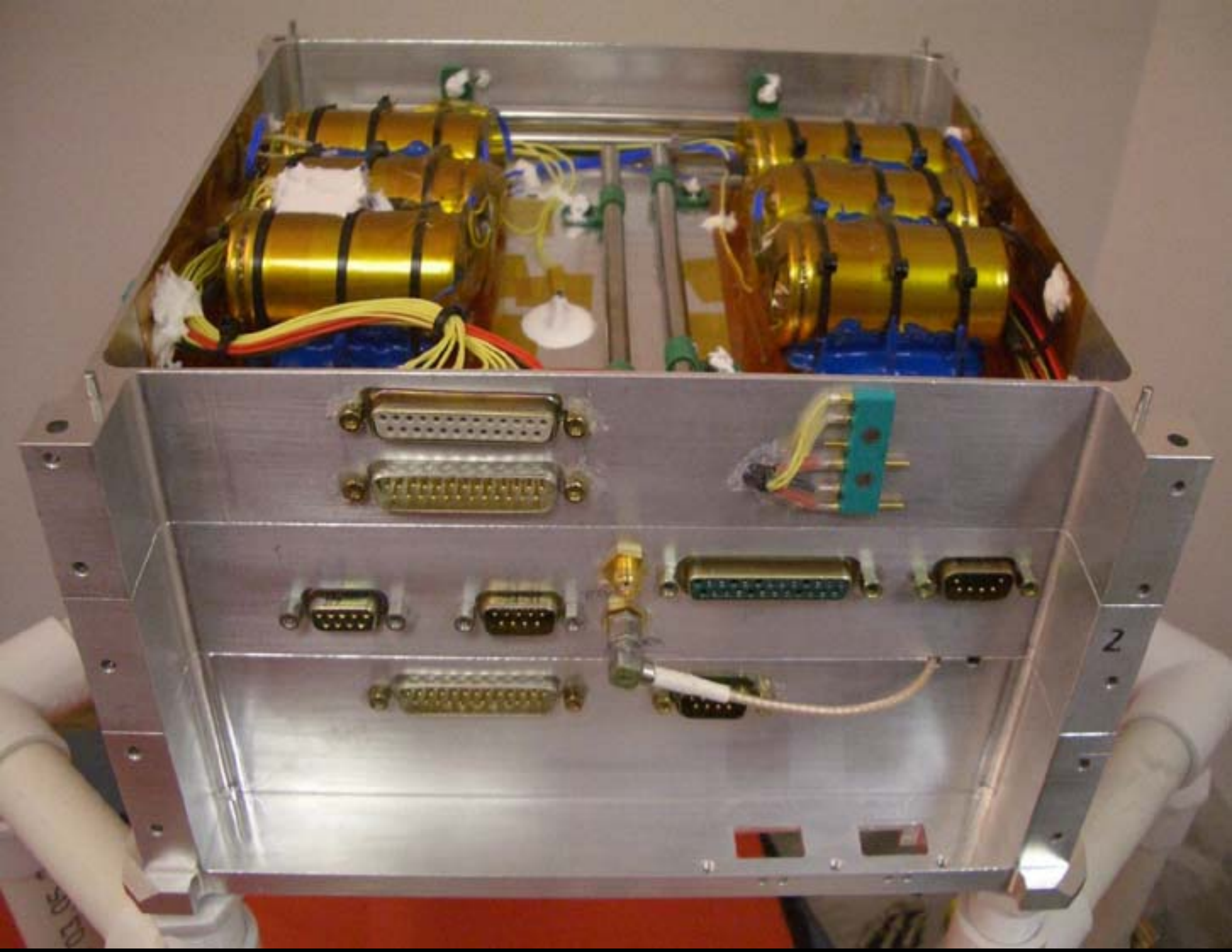




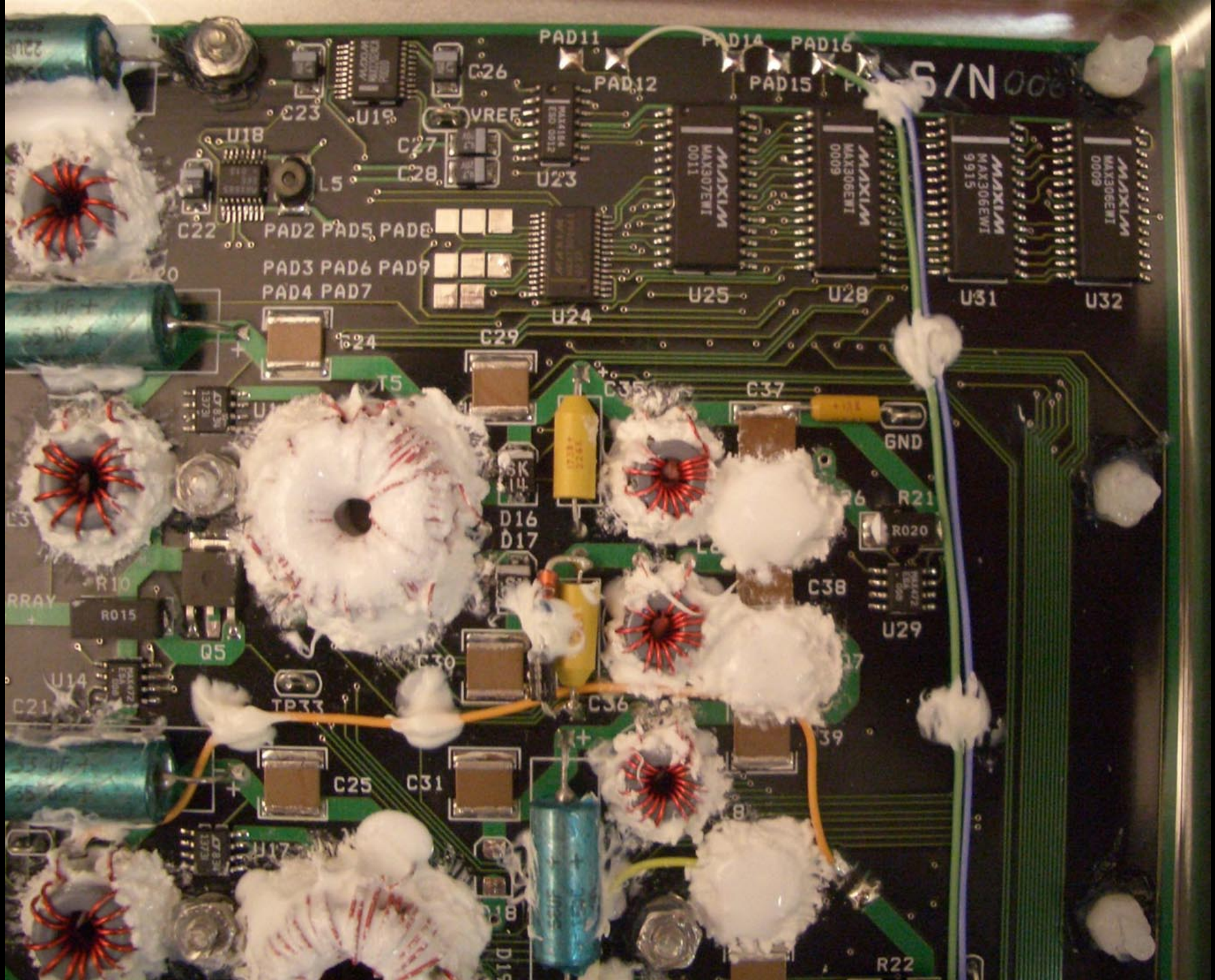

CORNELL DUBILIER
FLAT PACK
MLP131M400EK1A
130 MFD 400 VDC
-55°C TO +85°C
656 - 0215 - 078

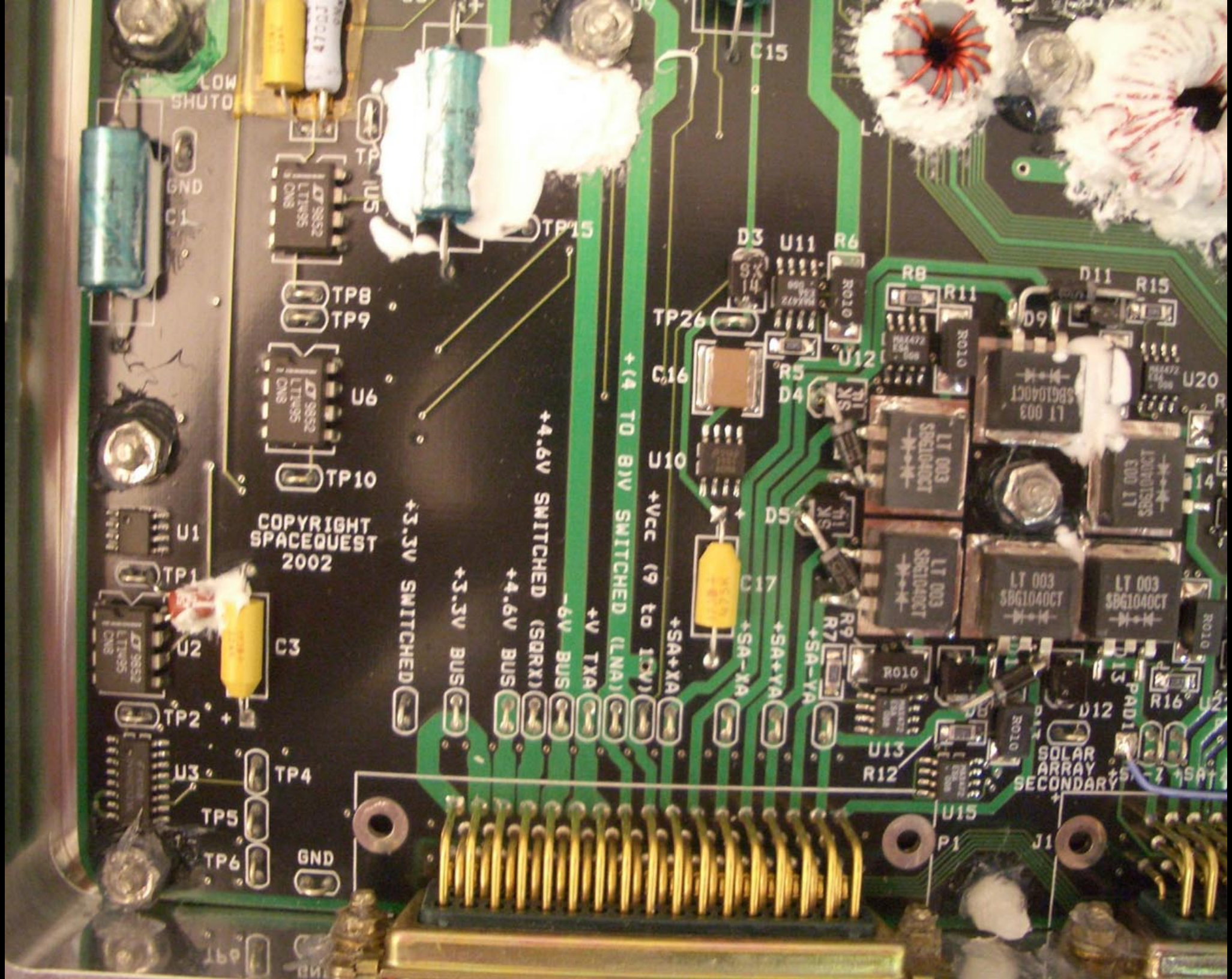
CORNELL DUBILIER
FLAT PACK
MLF131M400EK1A
130 MFD 400 VDC
-55°C TO +85°C
658 - 0216 - 076

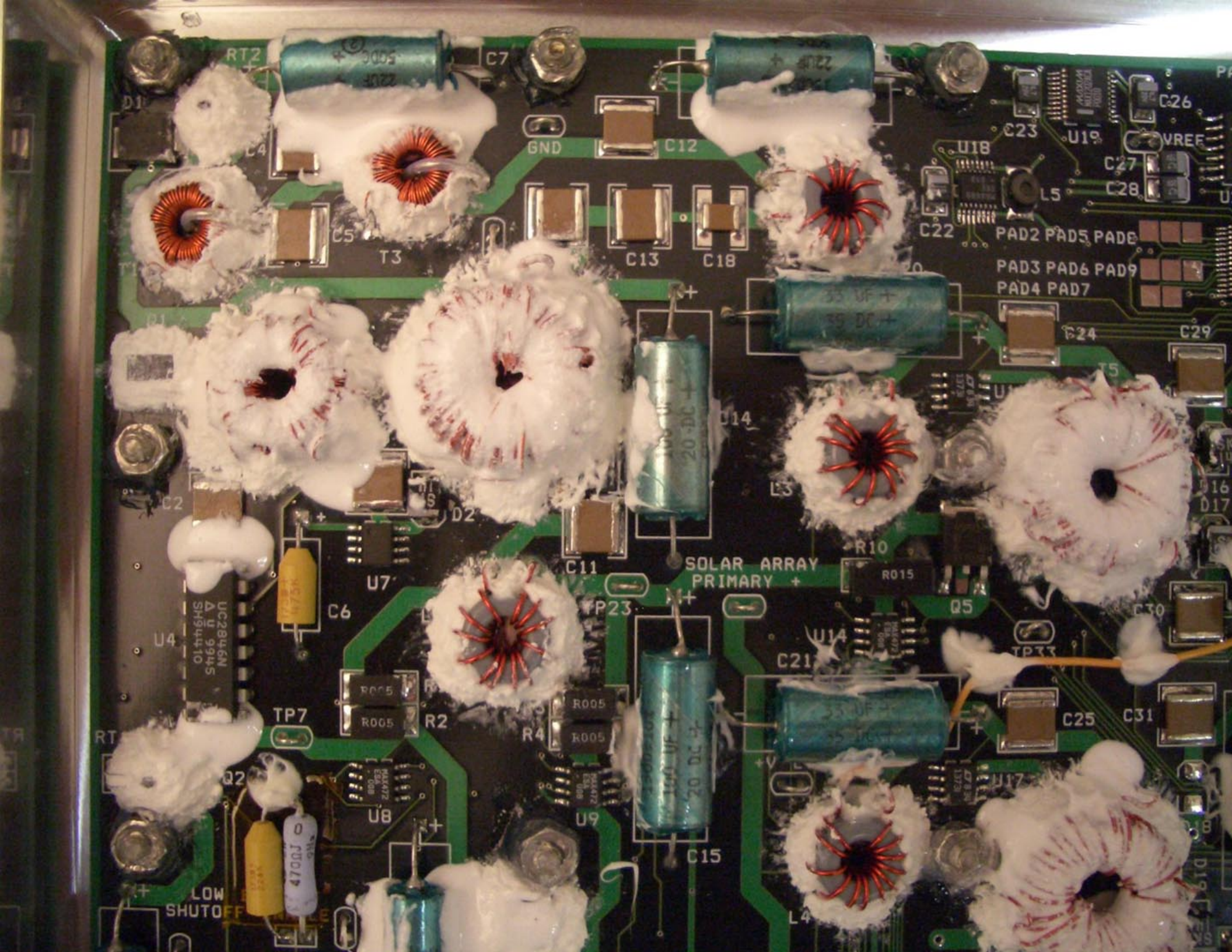


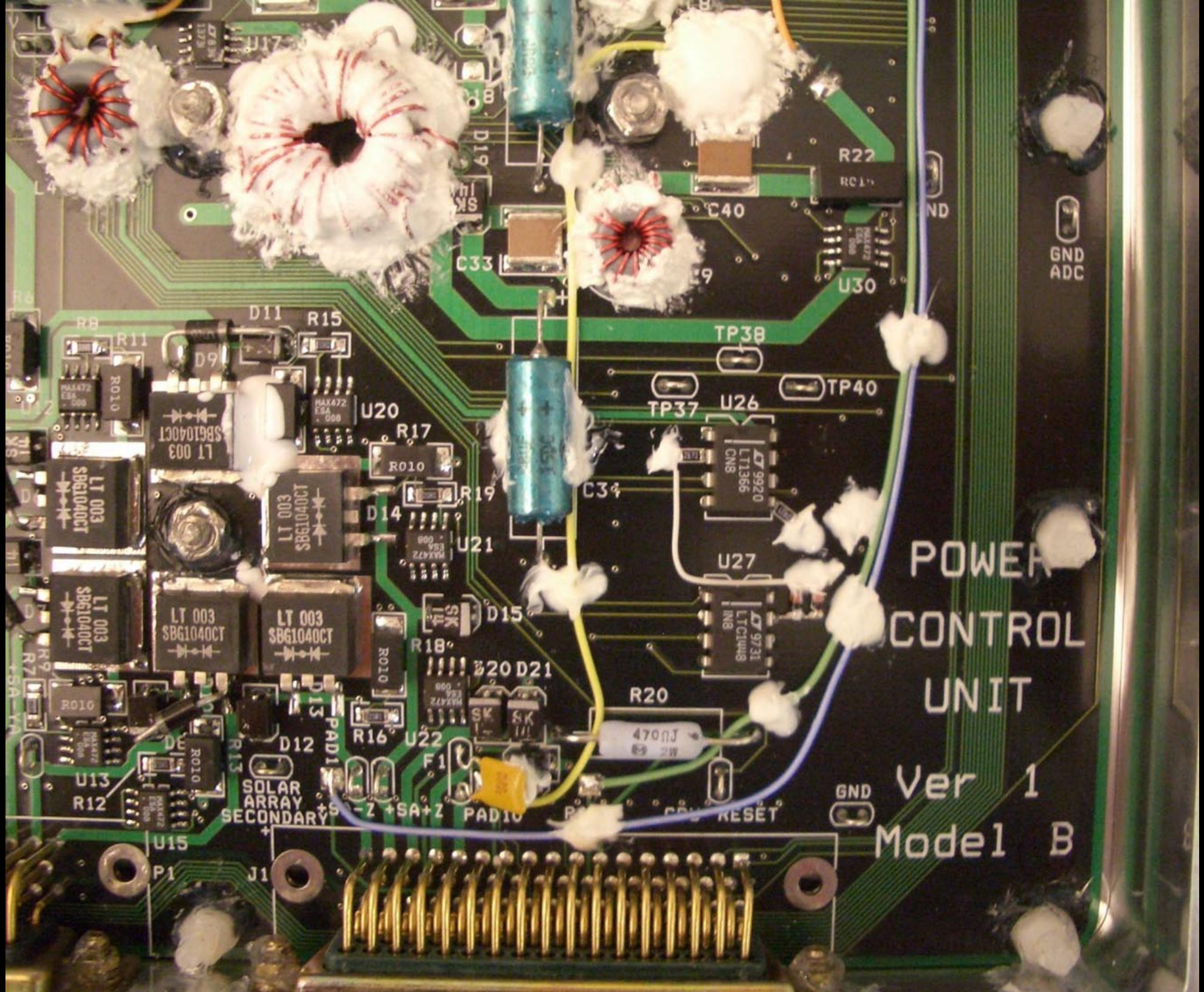


POWER
CONTROL
UNIT
Ver 1
Model B


PAD11
PAD14
PAD16
PAD12
PAD15
S/N
C26
C23
U19
VREF
U18
C27
C28
U23
L5
C22
PAD2 PAD5 PAD8
PAD3 PAD6 PAD9
PAD4 PAD7
U24
U25
U28
U31
U32
C24
C29
T5
C35
C37
GND
SK
14
D16
D17
R21
R020
R10
R015
Q5
C38
U29
U14
C21
TP33
C30
C36
C39
C25
C31
U17
R22

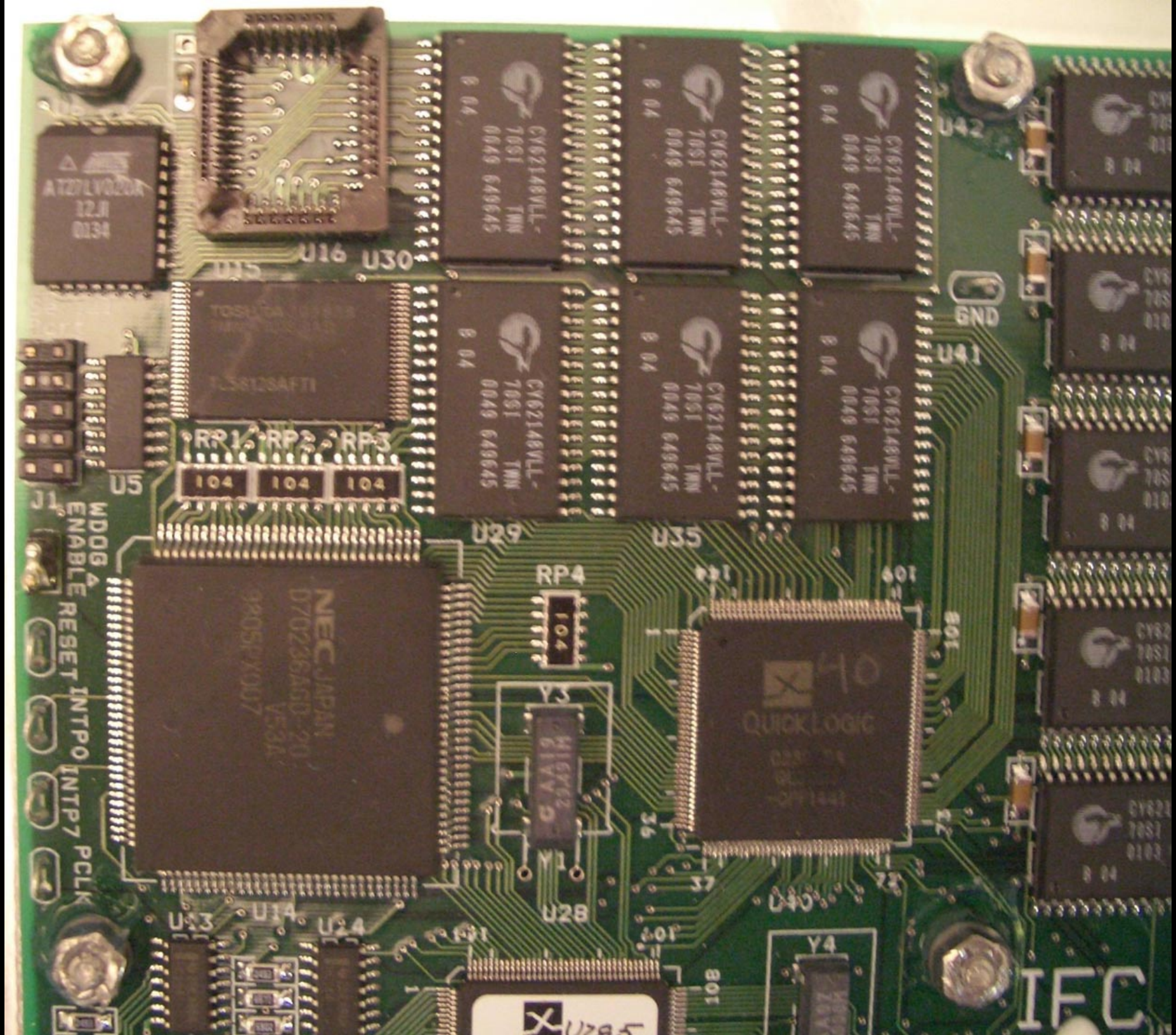

COPYRIGHT
SPACEQUEST
2002
+3.3V SWITCHED
+4.6V SWITCHED (SQRX)
+(4 TO 8)V SWITCHED (LNA)
+Vcc (9 to 10V)
+SA+XA
+SA-XA
+SA+YA
+SA-YA
+V TXA
-6V BUS
+4.6V BUS
+3.3V BUS
SOLAR
ARRAY
SECONDARY
GND
TP1
TP2
TP3
TP4
TP5
TP6
TP8
TP9
TP10
TP15
TP26
U1
U2
U3
U5
U6
U10
U11
U12
U13
U15
U20
C1
C3
C15
C16
C17
D3
D4
D5
D9
D11
D12
R5
R6
R7
R8
R9
R11
R12
R15
R16
P1
J1

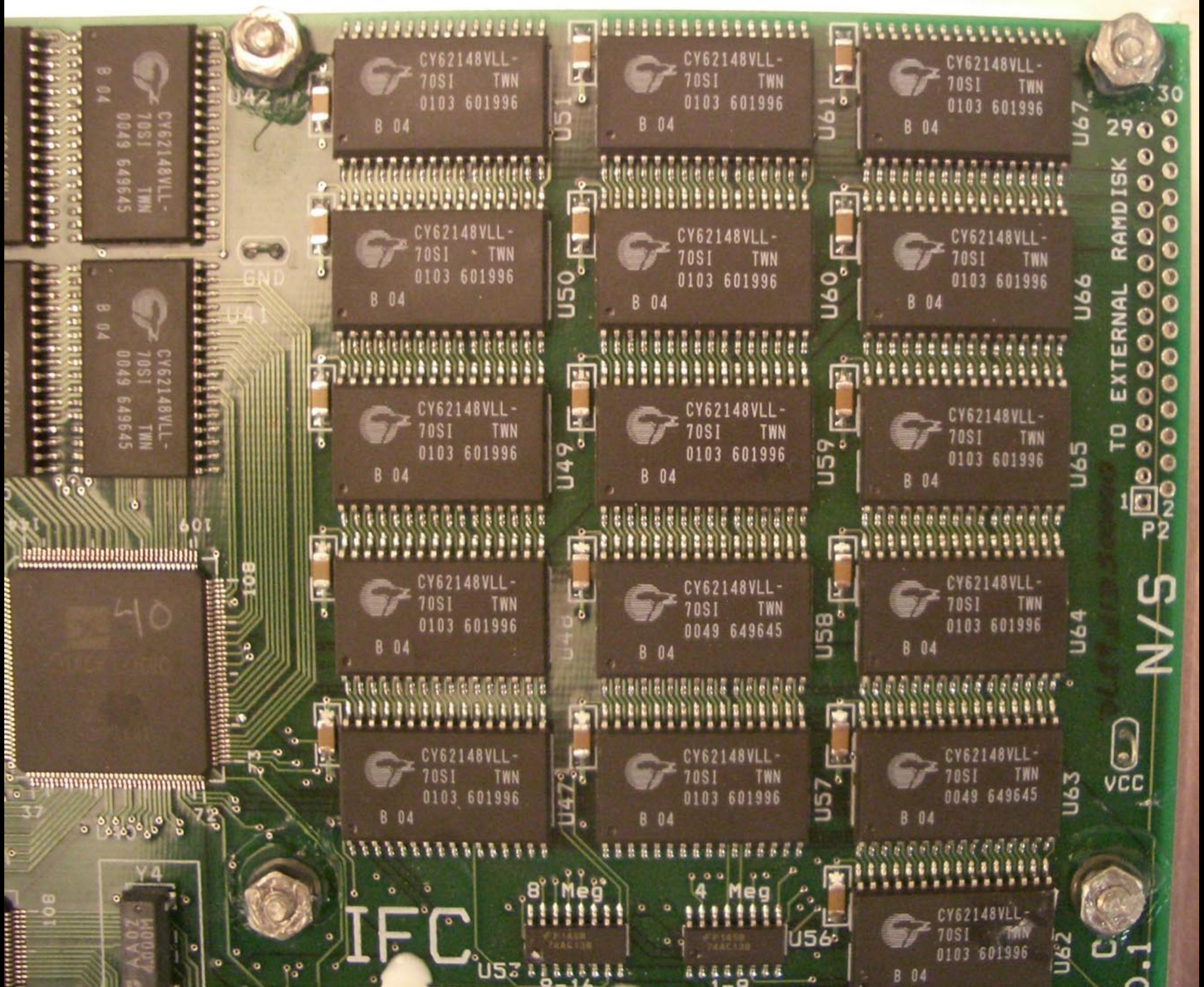

RT2
C7
D1
C4
GND
C12
C26
C23
U19
VREF
U18
C27
C28
L5
C22
PAD2 PAD5 PAD8
PAD3 PAD6 PAD9
PAD4 PAD7
C5
T3
C13
C18
C24
C29
T5
C14
L3
C2
D2
U7
C11
SOLAR ARRAY
PRIMARY +
R10
R015
Q5
C6
P23
U14
C21
TP33
U4
UC2844N
SH9444
9945
TP7
R2
R4
R005
C25
C31
Q2
U8
U9
+V
C15
U17
LOW
SHUTOFF
L4
D16
D17

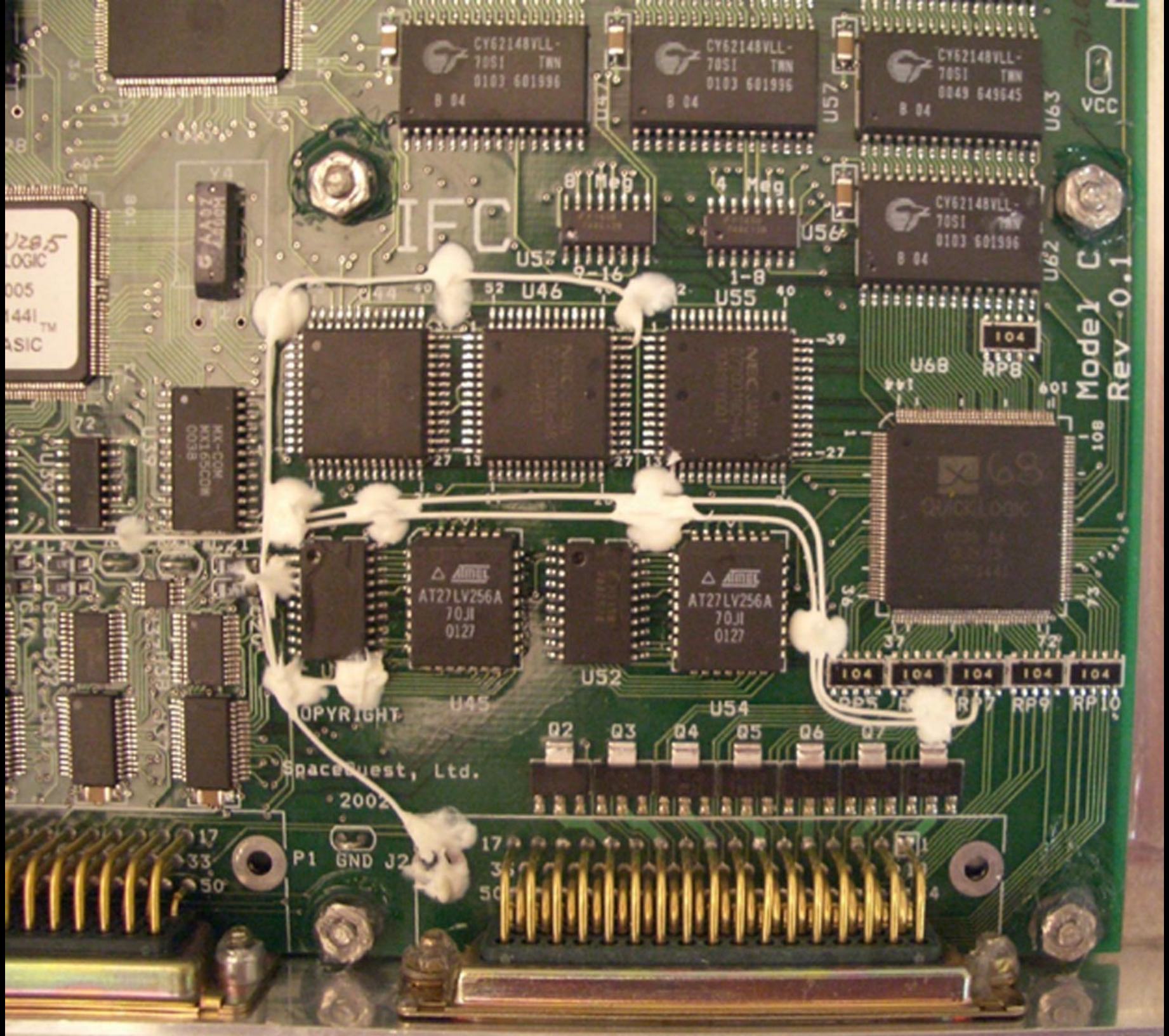

POWER
CONTROL
UNIT
Ver 1
Model B
SOLAR
ARRAY
SECONDARY
GND
ADC
RESET
U17
U30
U26
U27
U20
U21
U22
U13
U15
R22
C40
C33
C34
TP38
TP37
TP40
D11
R15
R17
R19
D14
D15
R18
D20
D21
R20
470nJ
D12
R16
F1
P1
J1
LT 003
SBG1040CT

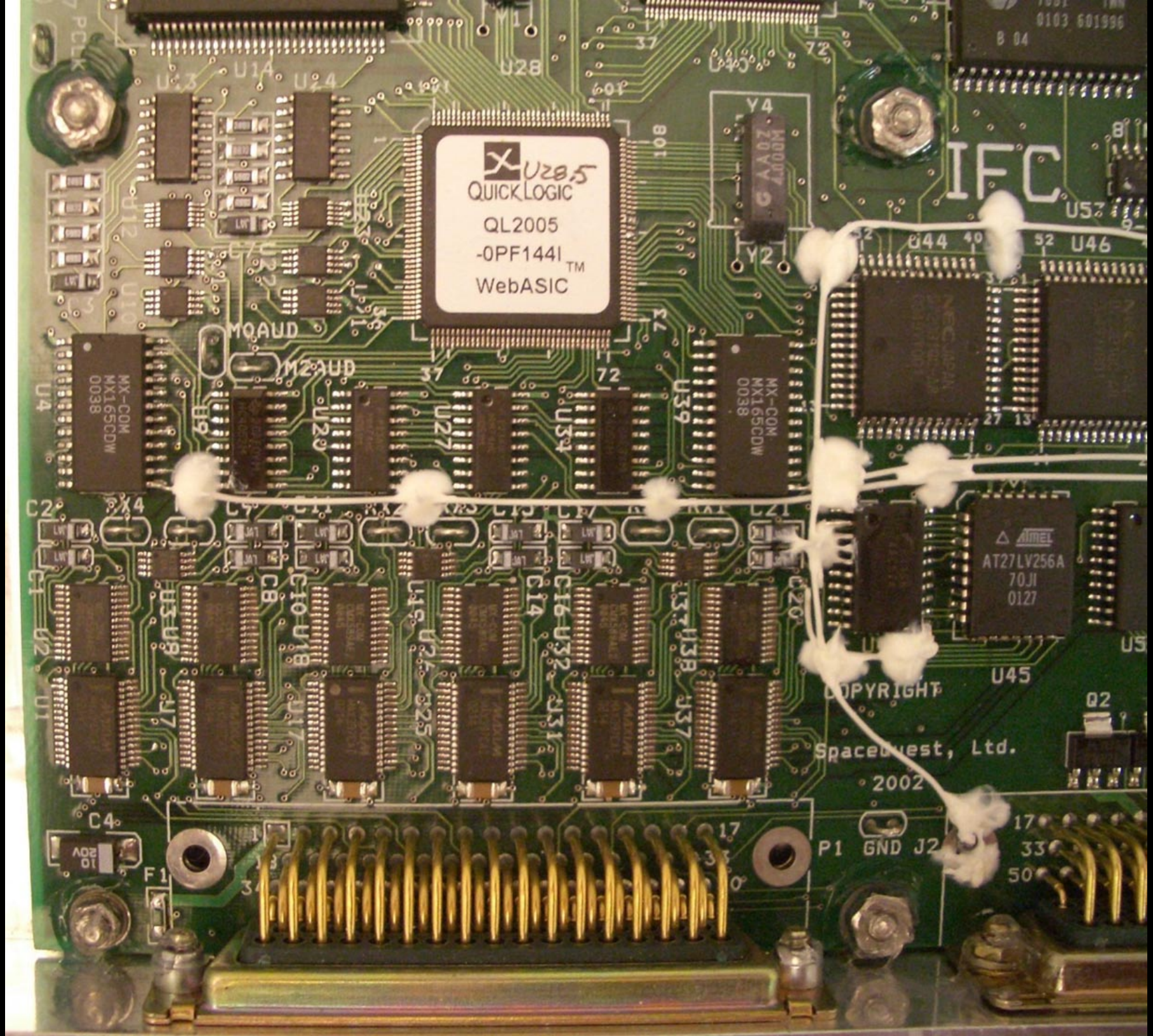
POWER
CONTROL
UNIT

IFC


U16
U30
U15
U42
GND
U41
U5
J1
WDOG ENABLE
RESET
INTP0
INTP7
PCLK
RP1
RP2
RP3
104
104
104
U29
U35
RP4
104
Y3
Y1
U28
U13
U14
U24
U40
Y4
U28
IEC


CY62148VLL-
70SI TWN
0103 601996
B 04
0049 649645
U42
U41
U51
U50
U49
U48
U47
U61
U60
U59
U58
U57
U56
U67
U66
U65
U64
U63
U62
GND
8 Meg
4 Meg
IFC
U53
TO EXTERNAL RAMDISK
P2
VCC
N/S
Y4


CY62148VLL-
70SI TWN
0103 601996
B 04
U57
U63
VCC
IFC
U58
U62
U52
9-16
1-8
U46
U55
104
RP8
U68
Model C
Rev 0.1
AT27LV256A
70JI
0127
U45
U54
Q2 Q3 Q4 Q5 Q6
RP9 RP10
COPYRIGHT
SpaceQuest, Ltd.
2002
P1 GND J2


U28.5
QUICK LOGIC
QL2005
-0PF144I
WebASIC
IFC
U45
COPYRIGHT
SpaceQuest, Ltd.
2002
AT27LV256A
70JI
0127
MX-COM
MX165CDW
0038
P1
GND J2
F1
Q2
Y4
Y2
U28
U46
U52
U53
U54
U55
U56
U57
U58
U59
U60
U61
U62
U63
U64
U65
U66
U67
U68
U69
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U71
U72
U73
U74
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U76
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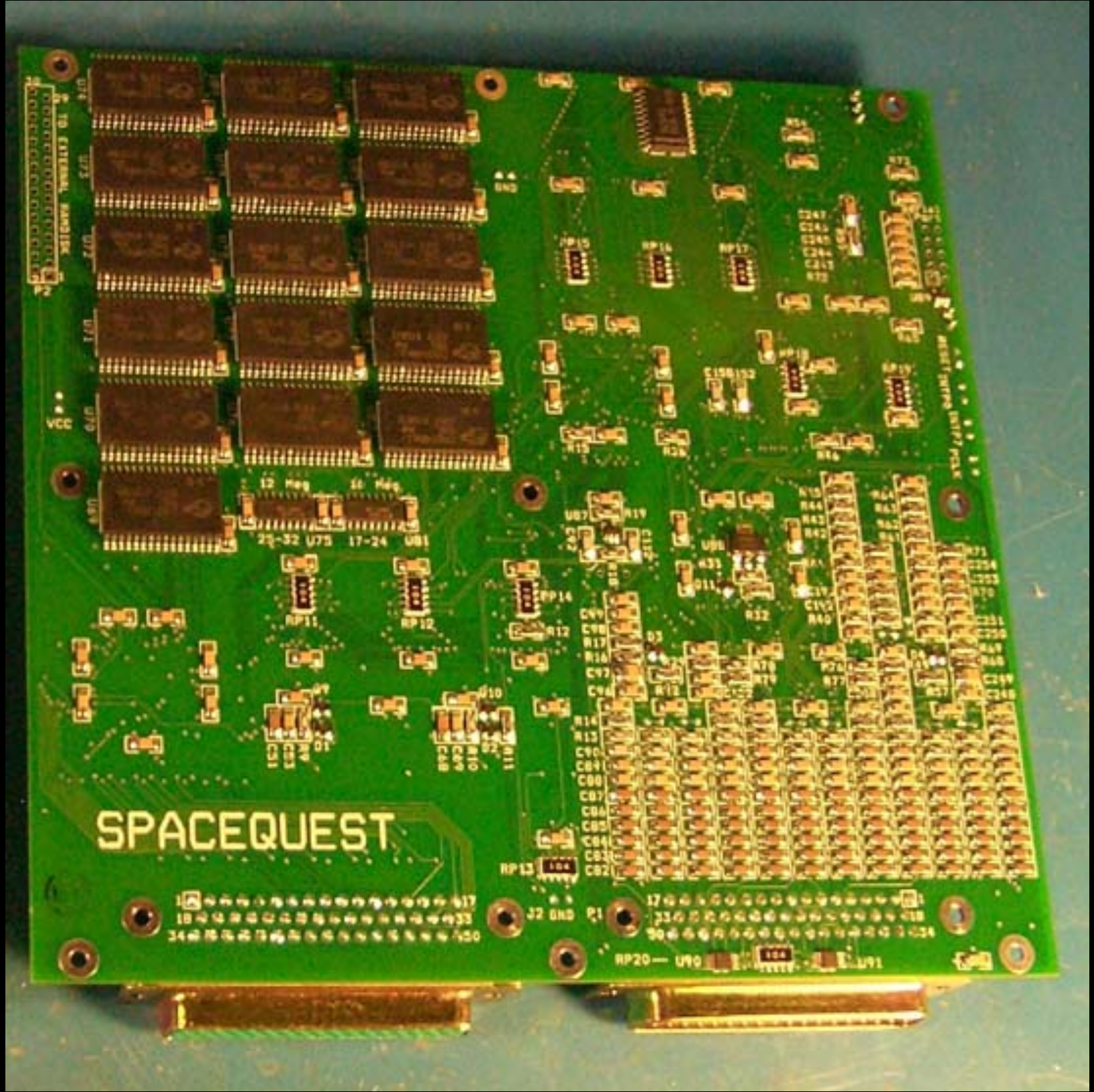
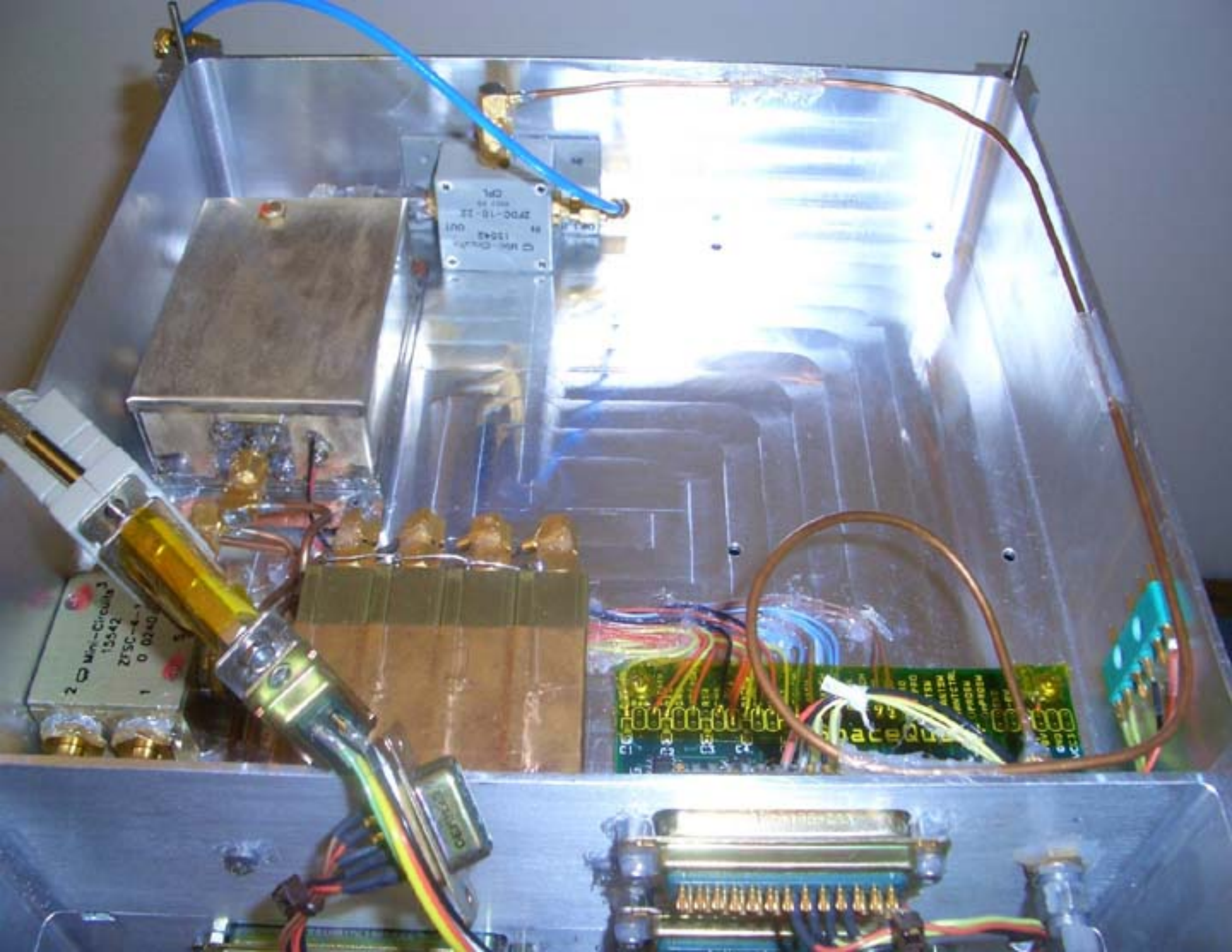
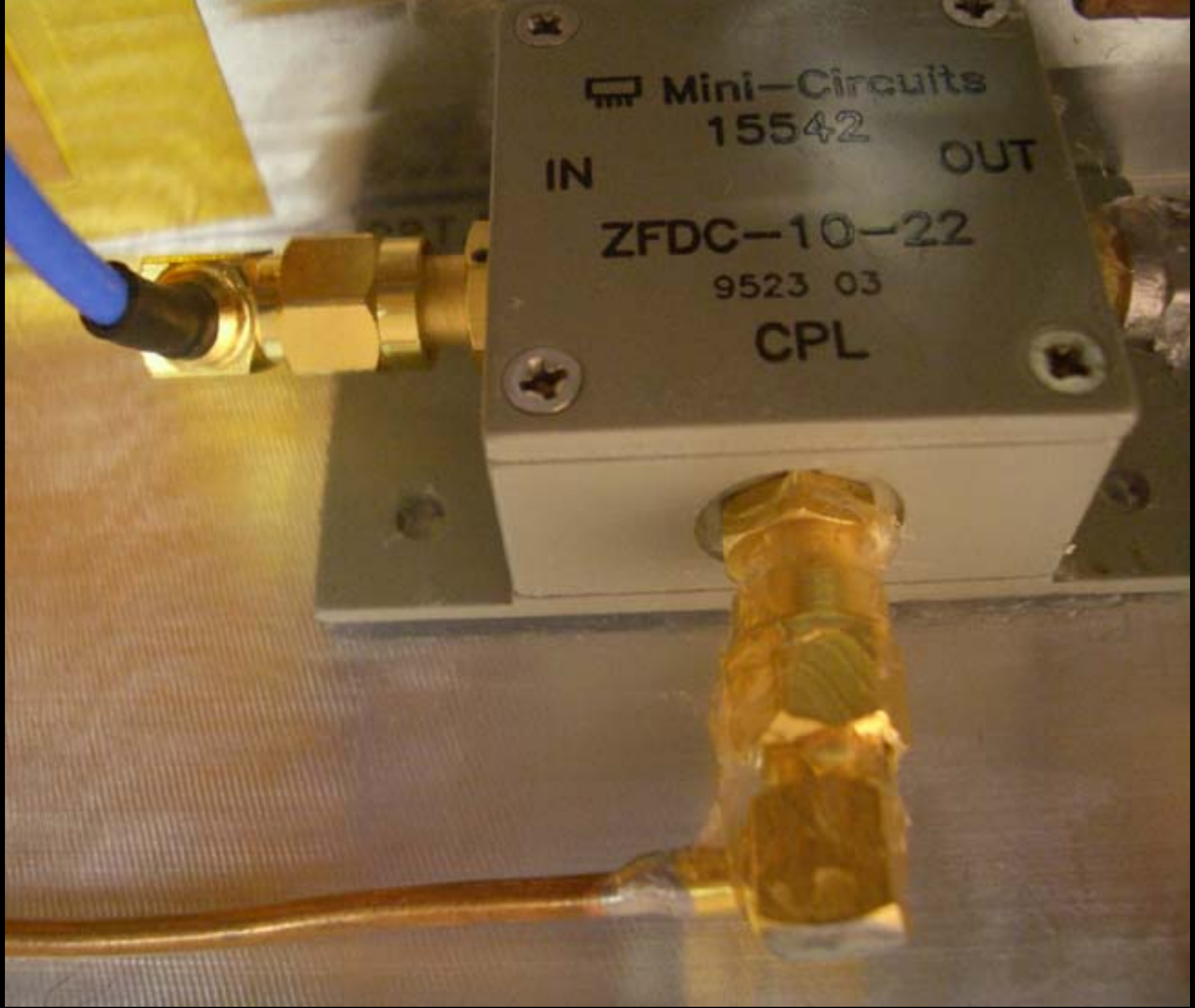
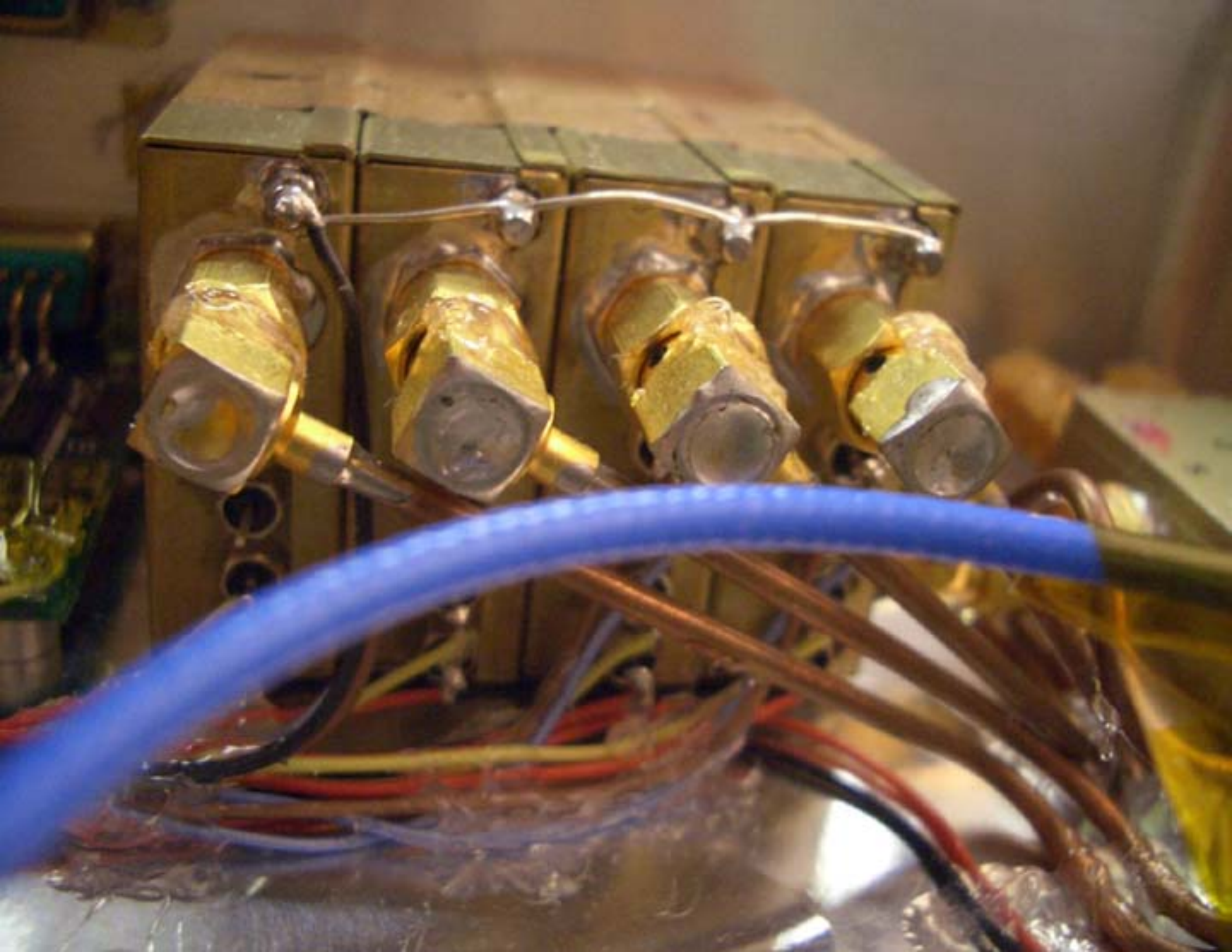
U85
U86
U87
U88
U89
U90
U91


SPACEQUEST



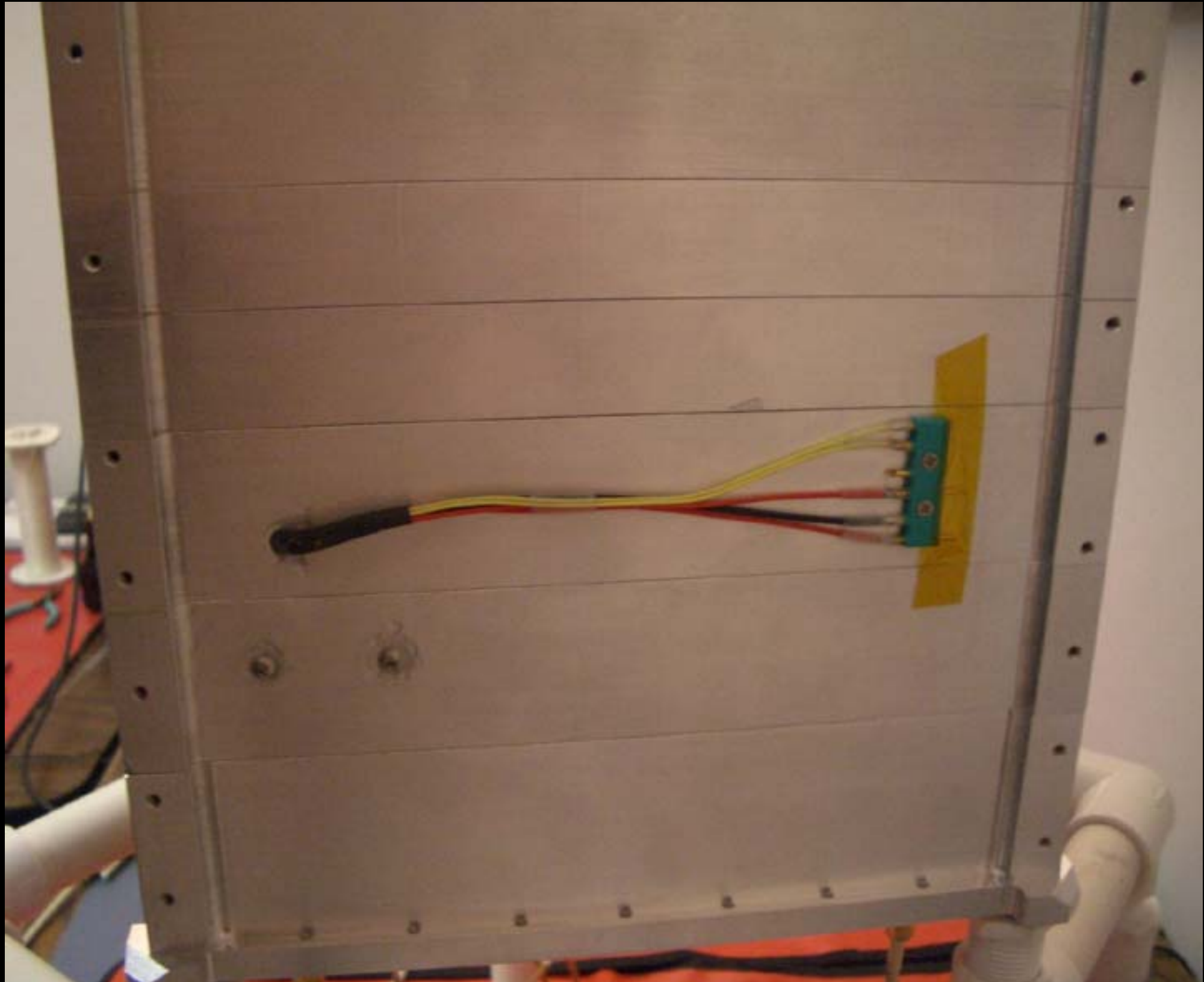

Mini—Circuits
15542
IN
OUT
ZFDC—10—22
9523 03
CPL

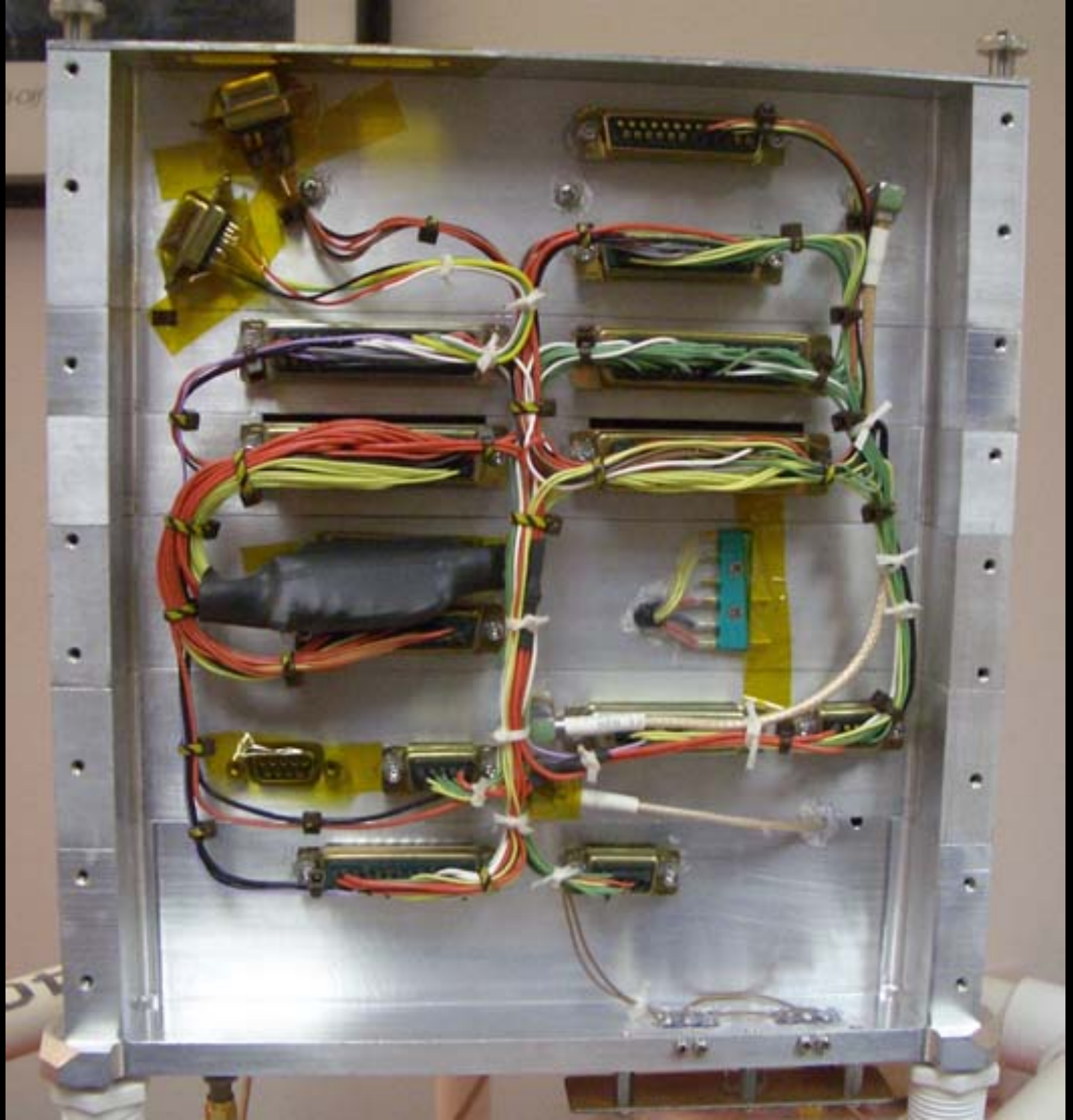
2
Mini-Circuits
3
15542
ZFSC-4-1
0 0240
1
4
S
#3



VCC4
ORX2CH
ORX4CH
OrRX4CH
ORXPRO
OPROSW
OnPROSW
GND
-8V
+8V
GND
VCC3
Rev 1

RECEIVER BUFFER
+8V
GND
-8V
ONPROSW
OPROSW
ONANTCTRL
ONANTSW
U6
U7
U10
U11





FedEx
Sprite
BOSTON

AMSAT
ECHO

AEROFLOT

Gates
1 - 3
16 - 30
Gates
4 - 15

Caring more about you
Alitalia
Delta
Travel Easy

AEROFLOT
AEROFLOT

AEROFLOT
Delta Air Lines

АЭРОФЛОТ

АЭРОФЛОТ
26
28

АЭРОФЛОТ

ШЕВРОТЕЛЬ
NOVOTEL

АЭРОПОРТ

АЭРОПОРТ

"ЗЕЛЕНЫЙ КАНАЛ"
GREEN CHANNEL
NOTHING TO DECLARE
ТАМОЖНЯ
ЗЕЛЕНЫЙ КОРИДОР
Green channel

КАРАТ
БАЙКОНУР
V2481
09:30
РЕГИСТРАЦИЯ
Check-in
111

ВНУКОВО

KAPAT

A
A
Б
B
В
C
СТЮАРДЕССА
HOSTESS

RA

SPUTNIK
HOTEL
BAIKONUR'S FIRST
INTERNATIONAL
STANDARD HOTEL
Гостиница
СПУТНИК

F 14

AMSAT
ECHO
By Hams For Hams

БАЙКОНУР СВЯЗЬ ИНФОРМ

ЗДЕСЬ
5 МАЯ 1955 г.
ВОЕННЫМИ СТРОИТЕЛЯМИ
В/ЧАСТИ 12253
БЫЛО ЗАЛОЖЕНО
ПЕРВОЕ ЗДАНИЕ
Г ОР. ЛЕНИНСКА
2004 6 12

PlayStation
Компьютерные
Игры

АКАДЕМИК
СЕРГЕЙ ПАВЛОВИЧ
КОРОЛЕВ

2004 6 12

Cutie Pie

БАЙКОНУР

79
93
Прохладительные
НАПИТКИ

80
80
60
70P

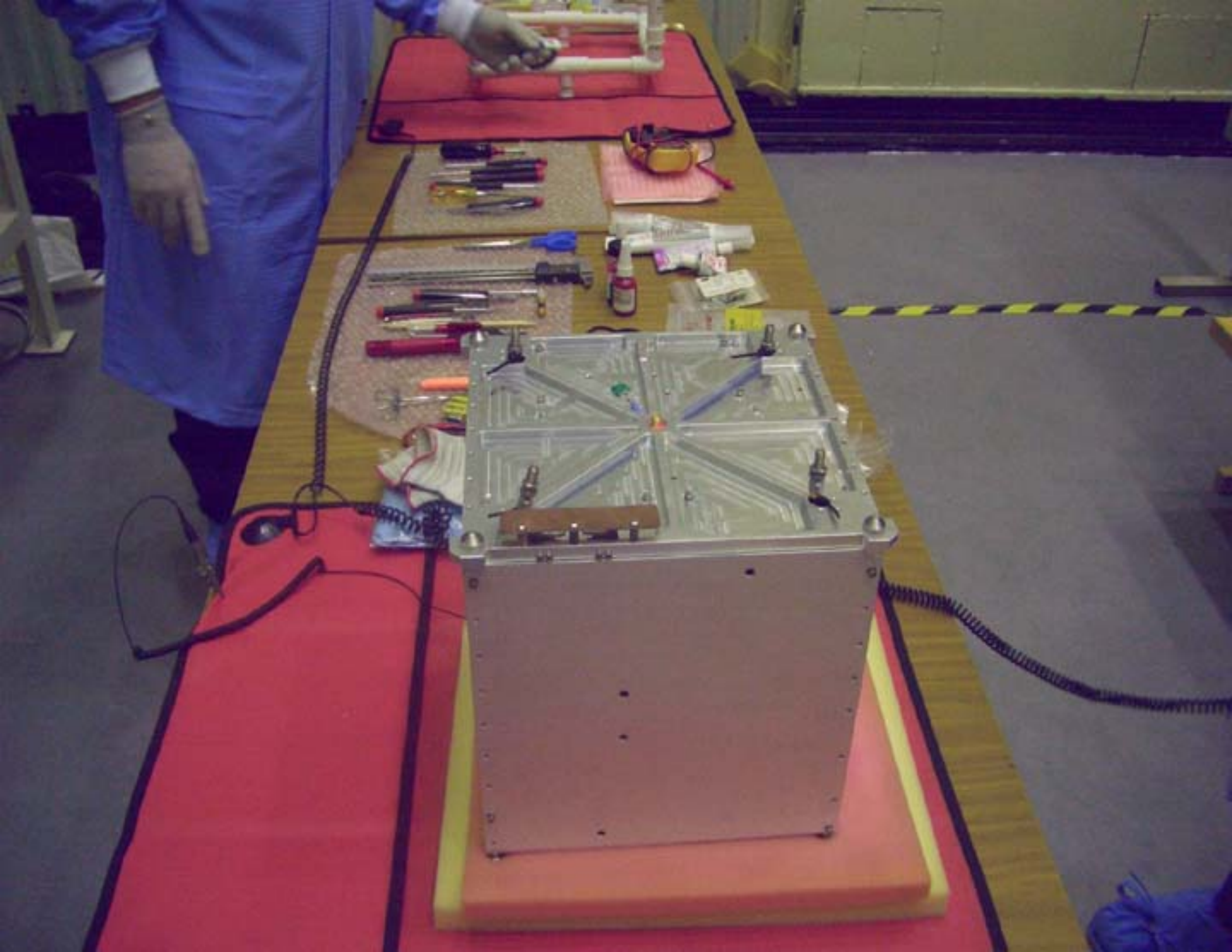
СПЕЦИИ
ДЛЯ
ЗИРА
ТМИН
30

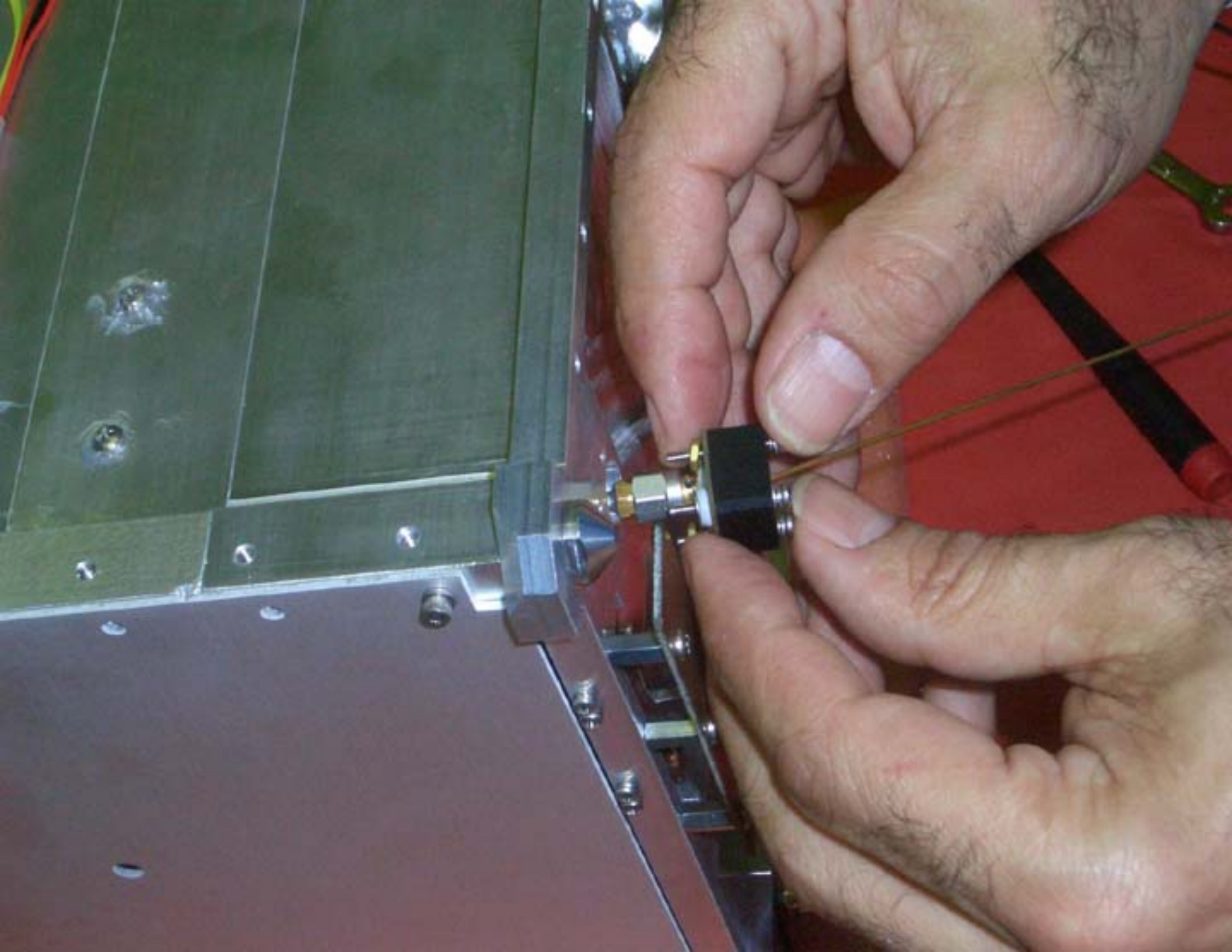
ЦЭИ КБТМ

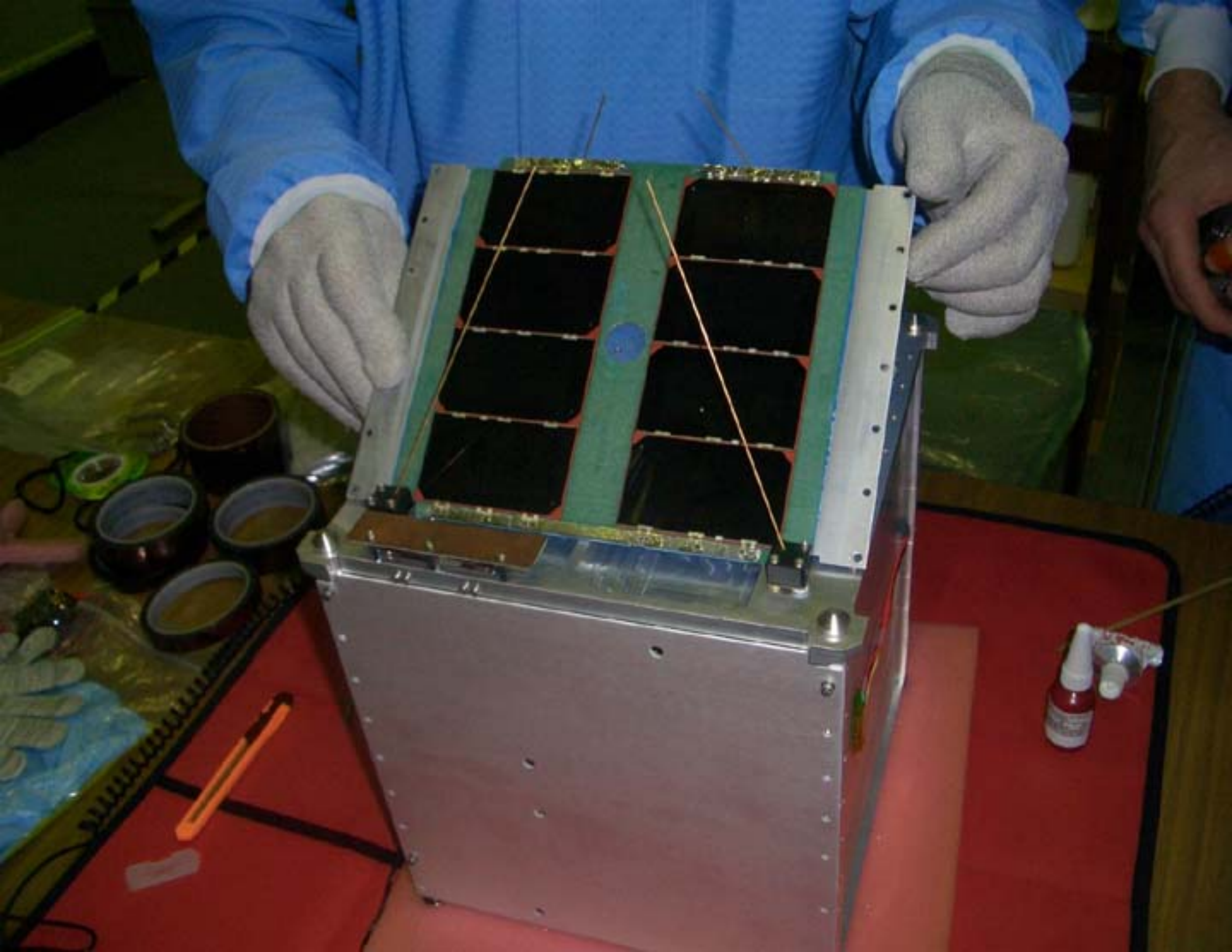
2
LatinSat-C
LatinSat-D
AMSAT-Echo

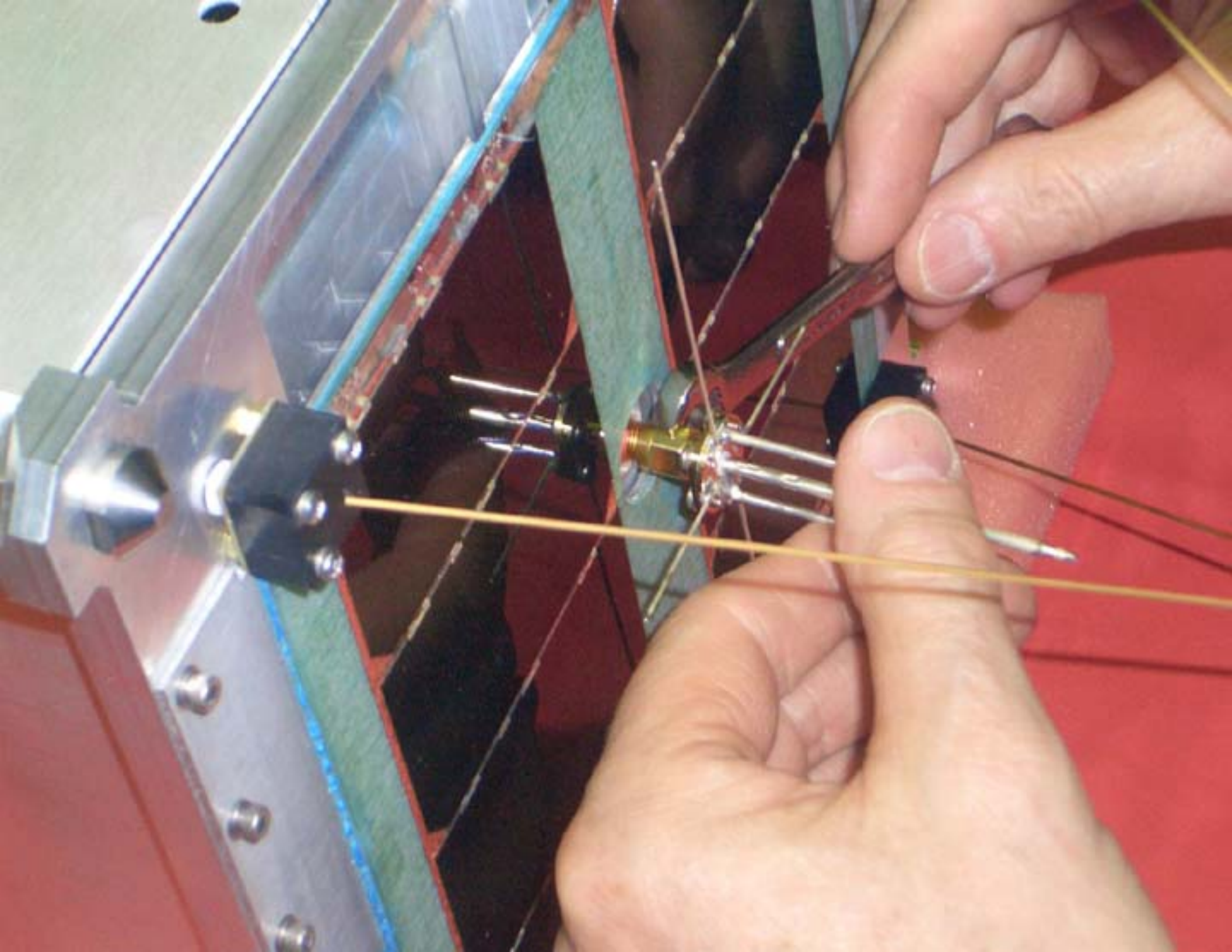
LatinSat-C
LatinSat-D
AMSAT-Echo
AMSAT
ECHO

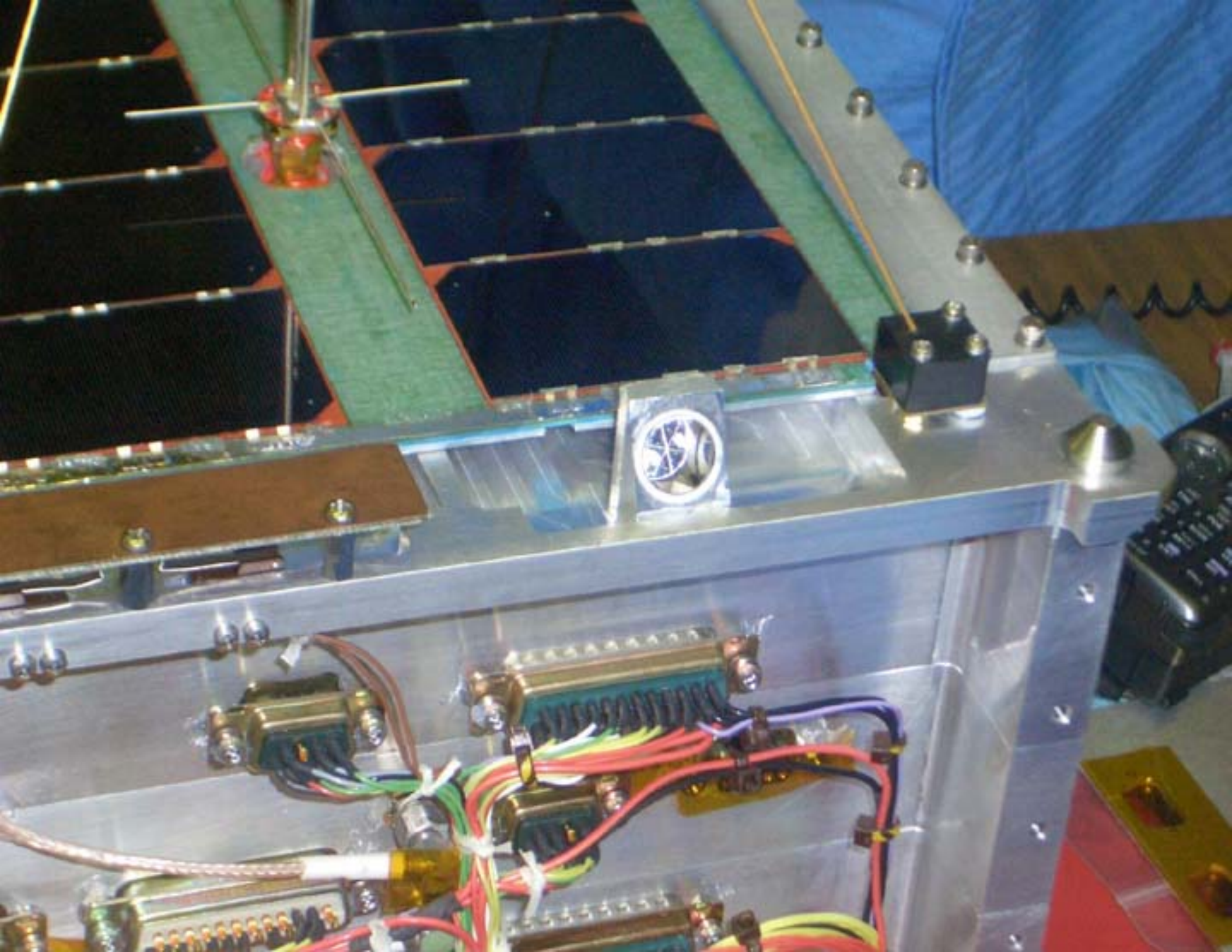
2
LatinSat-C
LatinSat-D
AMSAT-Echo
ECHO
SpaceQuest



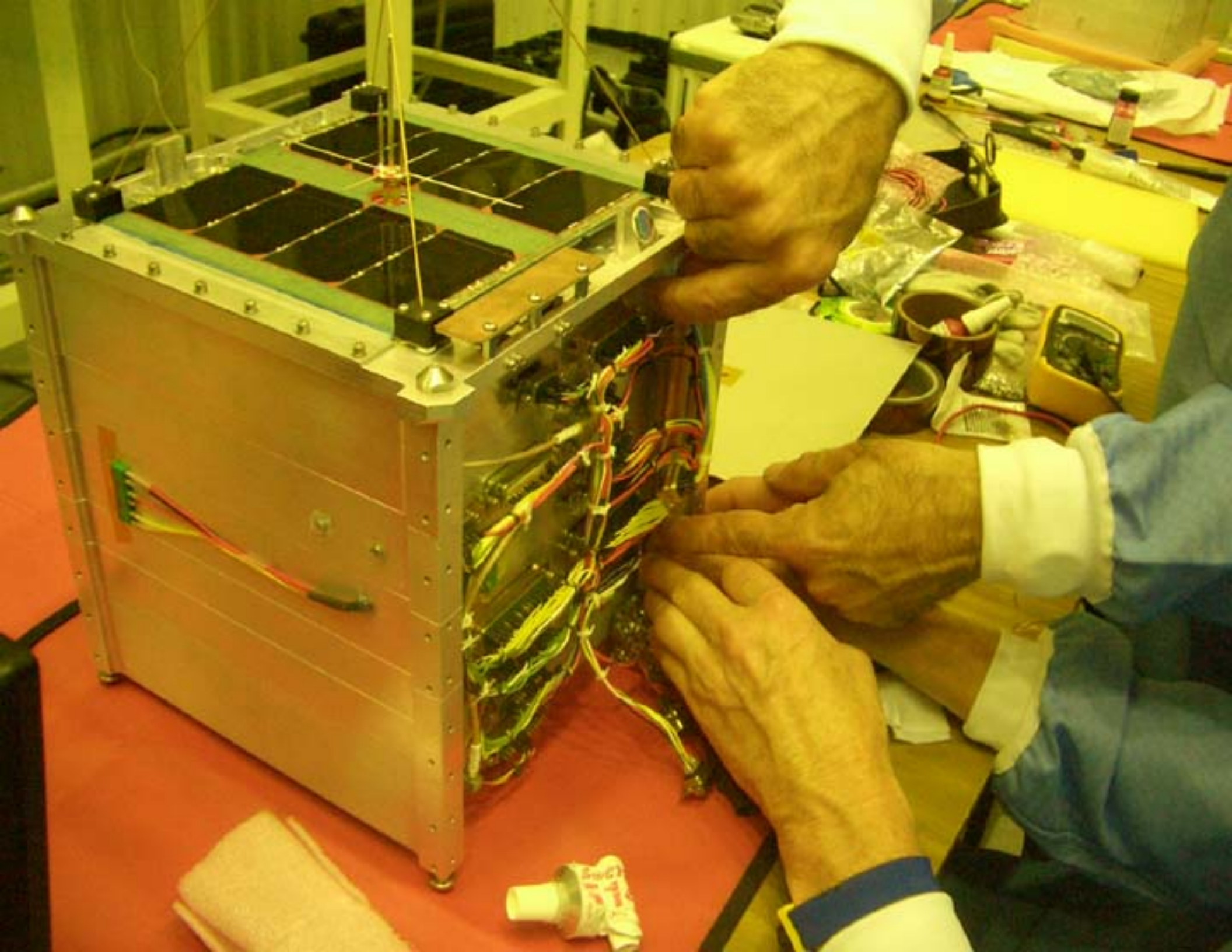


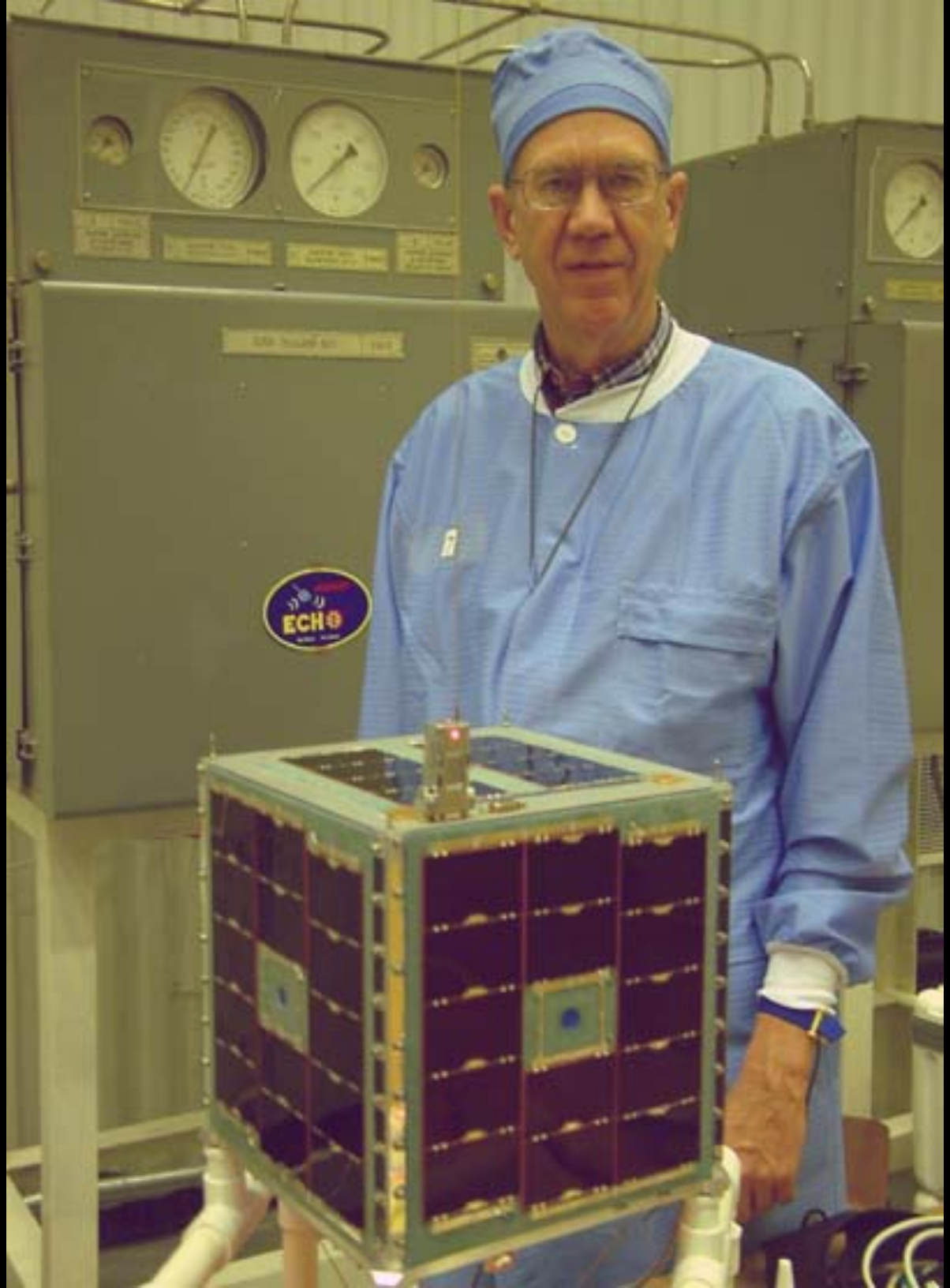




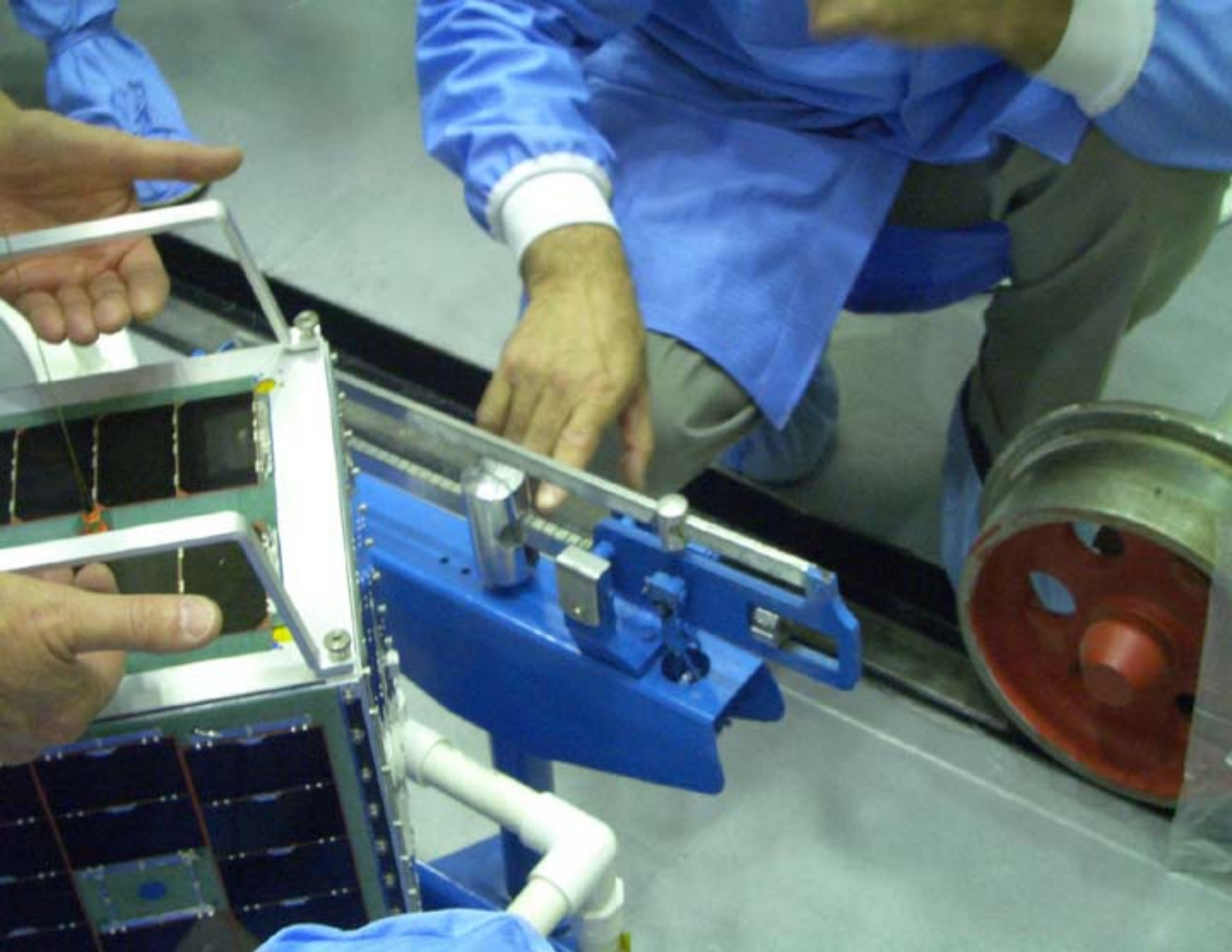


39




ECHO

H25



Latinsat-D and Amsat-Echo spacecraft No.ISCK-SQ-0037/7-03 dated 11 June 2003.

The parties confirm that after weighing of the Amsat-Echo spacecraft before its integration with the payload adapter of the Dnepr launch vehicle its weight is equal to:

11.14 kg

(in writing:

)

SpaceQuest, Ltd

Dr. Dino Lorenzini

2004

«Латинсат-D» и «А

0037/7-03 от 11 ию

Стороны подтверж
взвешивания космич
Эхо» перед его стык
нагрузки ракеты-нос
составил:

11.

(письменно:

International Spac

Mr. Boris Z
Authorized Re

CERTIFICATE OF WEIGHT

The present Certificate of Weight is made in pursuance of the Launch Services Agreement between SpaceQuest, Ltd. and International Space Company Kosmotras on the Launch of Latinsat-C, Latinsat-D and Amsat-Echo spacecraft No.ISCK-SQ-0037/7-03 dated 11 June 2003.

The parties confirm that after weighing of the Amsat-Echo spacecraft before its integration with the payload adapter of the Dnepr launch vehicle its weight is equal to:

11.14 kg

(in writing:)

SpaceQuest, Ltd

Dr. Dino Lorenzini

15 June 2004

ВЕСОВОЙ СЕРТИФИКАТ

Настоящий Весовой Сертификат составл
исполнение Контракта на пусковые услу
между СпейсКвест, Лтд. и МКК «Космот
на запуск спутника (ов) «Латинсат-С»,
«Латинсат-D» и «Амсат-Эхо» № ISCK-SQ
0037/7-03 от 11 июня 2003 г.

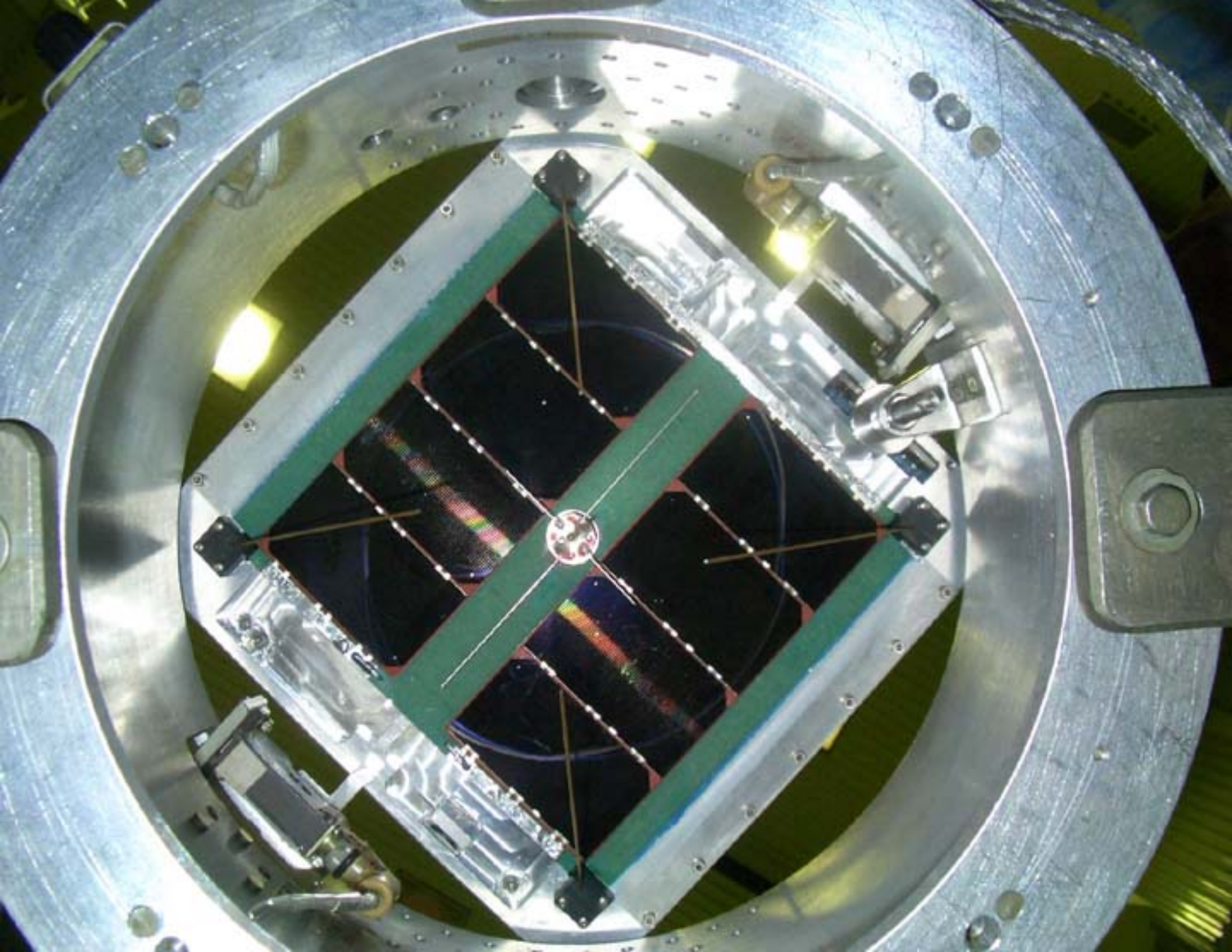
Стороны подтверждают, что по результатам
взвешивания космического аппарата «Амса
Эхо» перед его стыковкой с адаптером поле
нагрузки ракеты-носителя «Днепр» его вес
составил:

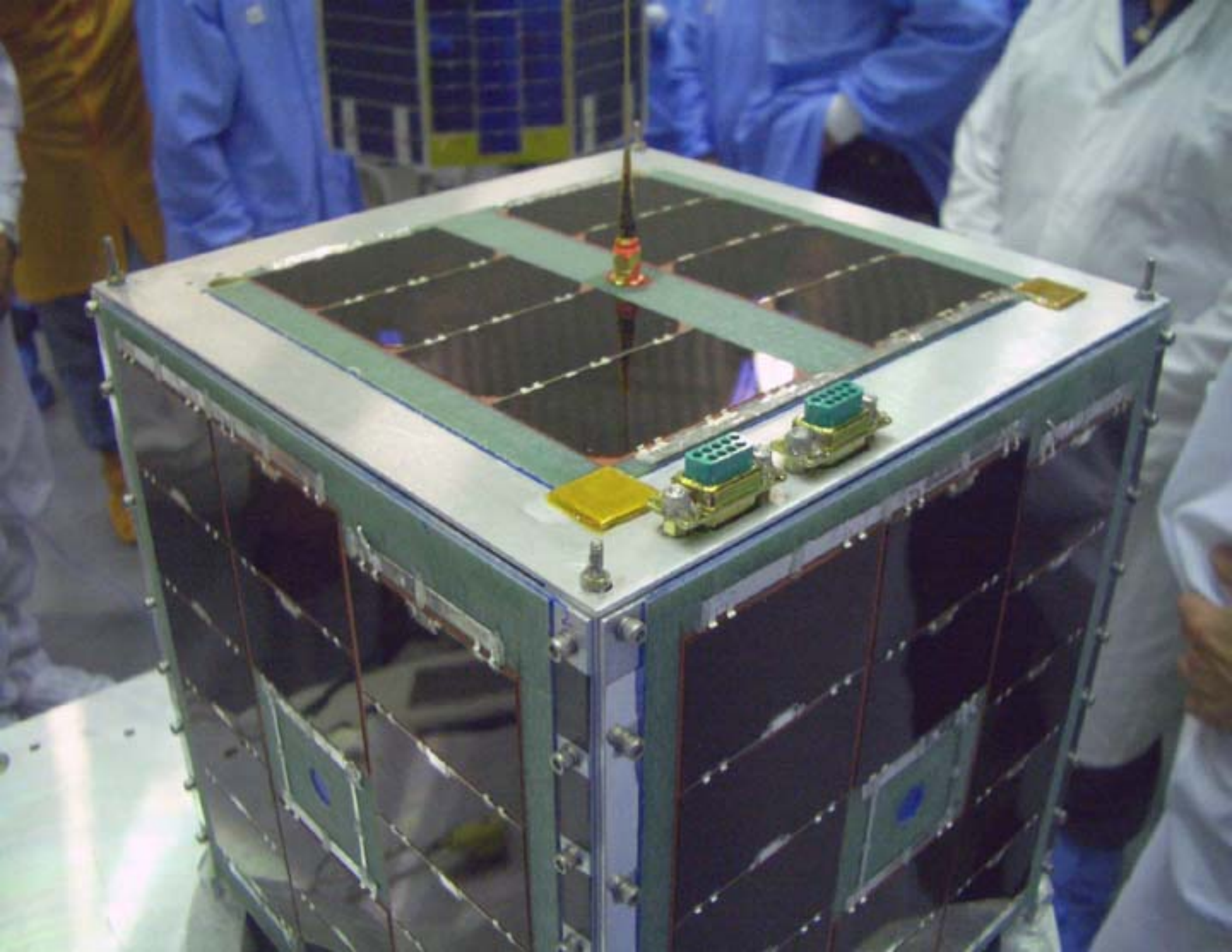
11.14 кг

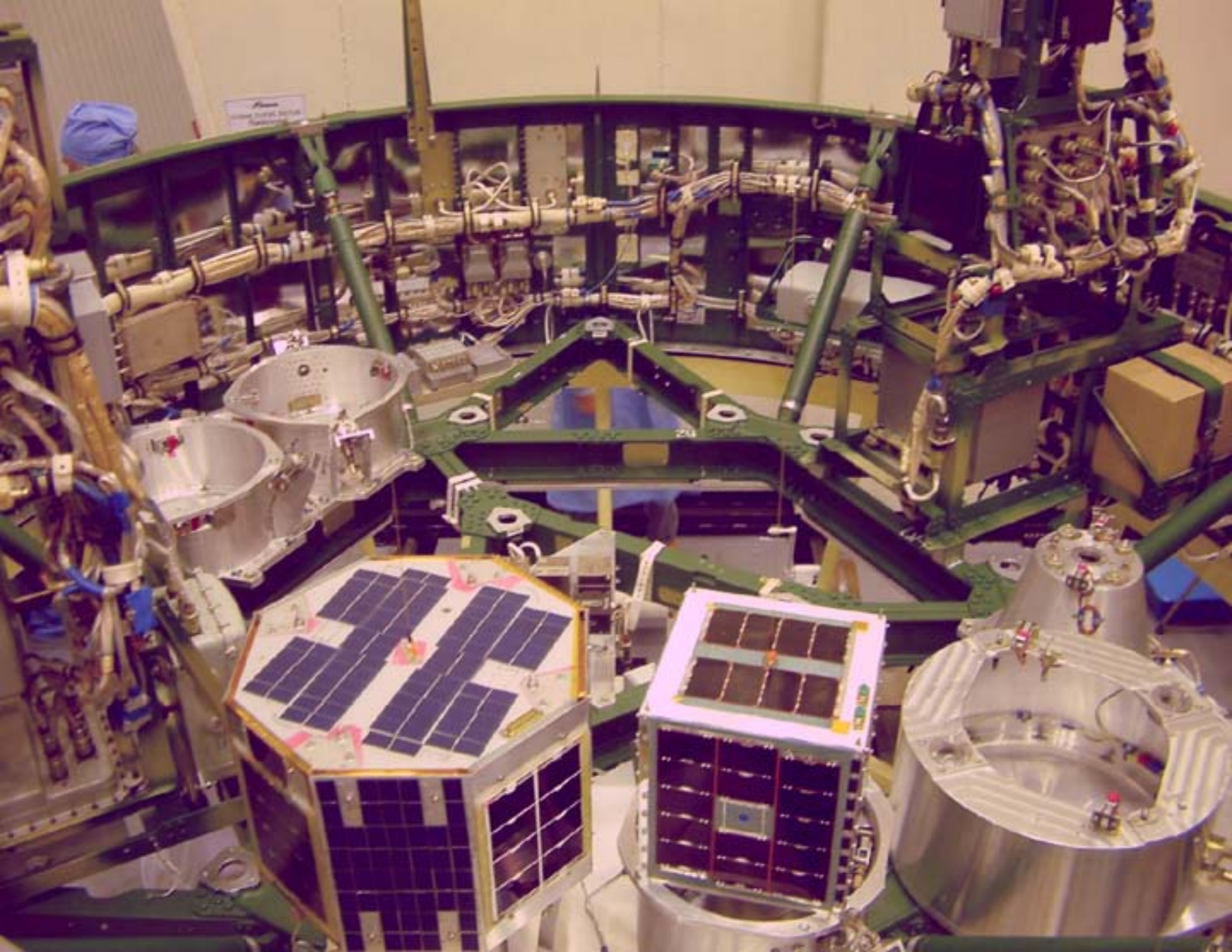
(письменно:

International Space Company Kosmotra

Mr. Boris Zakh







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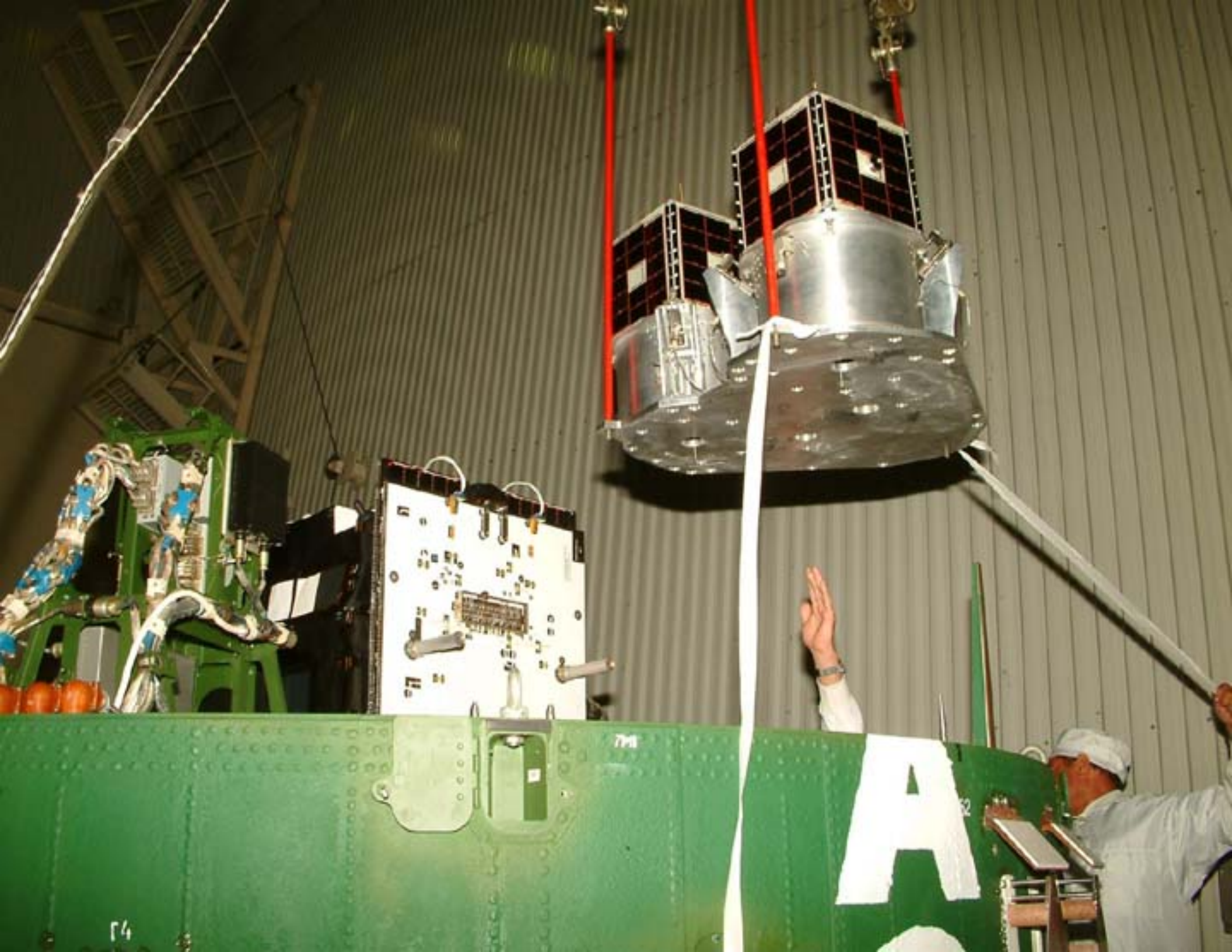

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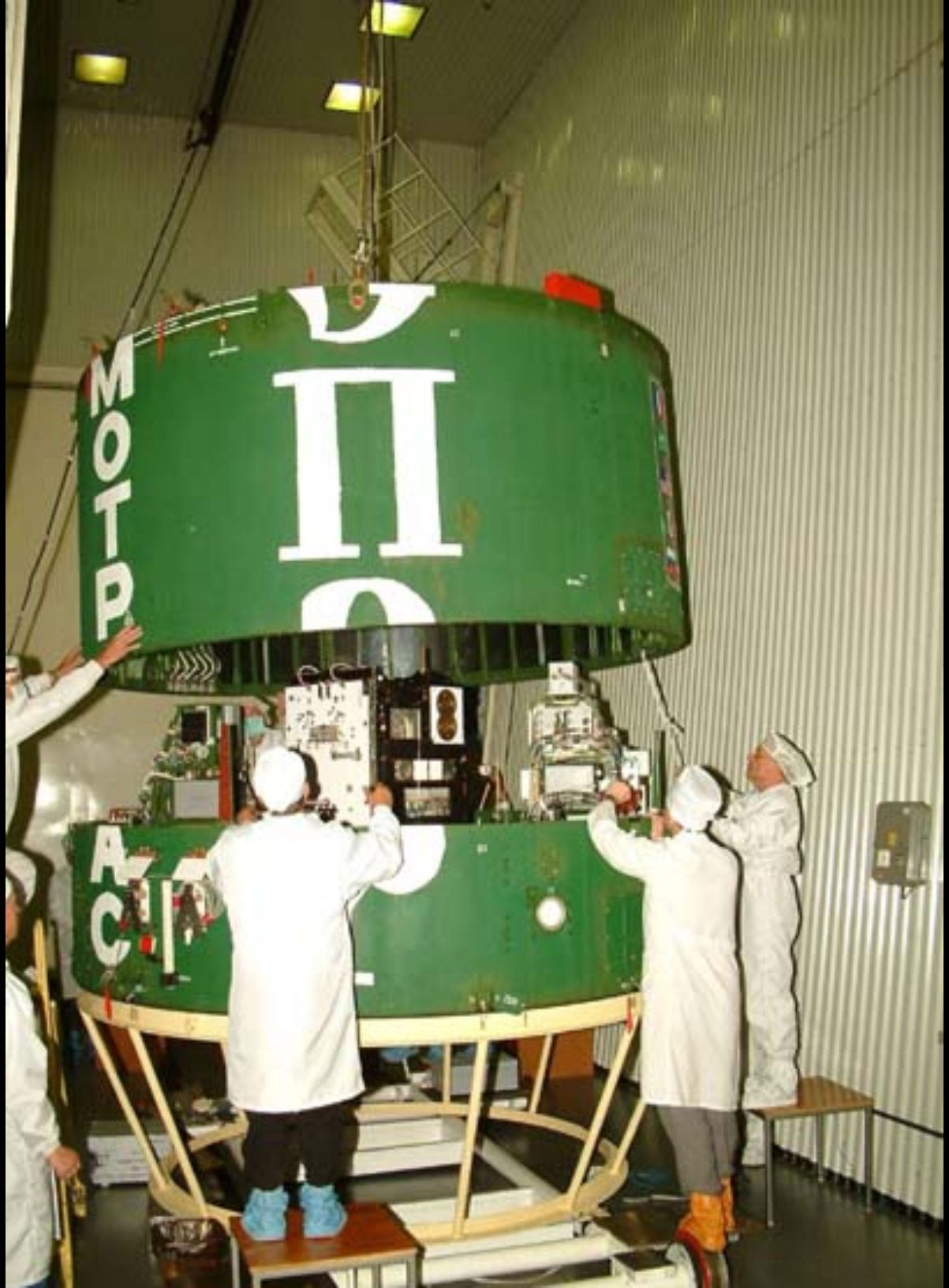
МОТР

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SpaceQuest
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Aerospace Systems
YUZHMASH

ВИНКА!

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FLOWER

RA-85470

http://bach.as.arizona.edu/gallery/echo